The gateway to all good things?

Commoning, sustainability, and post-capitalist possibility in UK community waste initiatives

Sara Skarp

Submitted for the degree of Doctor of Philosophy School of Environmental Sciences, University of East Anglia November 2021

©This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with the author and that use of any information derived there-from must be in accordance with current UK Copyright Law. In addition, any quotation or extract must include full attribution.

Abstract

There is a growing recognition that modern waste has serious sustainability and justice implications, for which capitalist waste management strategies appear insufficient. However, the extant literature on post-capitalism has not, to date, adequately dealt with waste. Likewise, critical waste studies rarely attempt to imagine what post-capitalist strategies for waste might be. This thesis sets out to address this gap. It does so by developing a novel conceptual framework that combines approaches to waste materiality with post-capitalist approaches to organisation, specifically commoning.

This thesis presents a multi-method study of community waste projects and how they prefigure post-capitalist waste strategies. Specifically, it draws on a mapping survey of the UK Community Waste Movement (n=75), with three in-depth case studies (a litter-picking group, a reuse hub, and an item-lending library), which used semi-structured interviews (n=35) and context observation to explore community waste organising on the ground.

This thesis highlights how the Community Waste Movement is diverse, yet struggles with recognition and funding. Even so, it provides vital services to society, from street cleaning to combatting loneliness, and through resistance and the simultaneous provision of alternatives it performs the possibility of more just and sustainable waste systems and practices. The novel conceptual framework highlights critical points of difference between community-based and mainstream capitalist waste strategies. By bringing waste and commoning together, it shows that grassroots responses to waste create possibilities that go beyond effects on waste tonnage. It also demonstrates, for the first time, how the simple acts of borrowing, reusing, and picking litter can prefigure post-capitalist waste strategies. The thesis concludes with a set of 12 principles for such strategies, relevant for present and future waste organisers, both in communities and Local Authorities. It ends by setting out an agenda for future research on approaches to post-capitalist organisation of and for waste.

Access Condition and Agreement

Each deposit in UEA Digital Repository is protected by copyright and other intellectual property rights, and duplication or sale of all or part of any of the Data Collections is not permitted, except that material may be duplicated by you for your research use or for educational purposes in electronic or print form. You must obtain permission from the copyright holder, usually the author, for any other use. Exceptions only apply where a deposit may be explicitly provided under a stated licence, such as a Creative Commons licence or Open Government licence.

Electronic or print copies may not be offered, whether for sale or otherwise to anyone, unless explicitly stated under a Creative Commons or Open Government license. Unauthorised reproduction, editing or reformatting for resale purposes is explicitly prohibited (except where approved by the copyright holder themselves) and UEA reserves the right to take immediate 'take down' action on behalf of the copyright and/or rights holder if this Access condition of the UEA Digital Repository is breached. Any material in this database has been supplied on the understanding that it is copyright material and that no quotation from the material may be published without proper acknowledgement.

Table of Contents

ABSTRACT	2
TABLE OF CONTENTS	3
ABBREVIATIONS	6
ACKNOWLEDGMENTS	7
PREFACE – FROM WALL-E TO POST-CAPITALISM	10
CHAPTER 1: INTRODUCTION	12
1.1 A FRAME FOR POSSIBILITY	15
1.2 APPROACHING COMMUNITY, WASTE, AND POST-CAPITALISM	20
1.4 OUTLINING WHAT IS TO COME	23
CHAPTER 2: TOWARDS A FRAMEWORK FOR POST-CAPITALIST WASTE STUDIES	26
2.1 MAINSTREAM APPROACHES TO WASTE	26
2.2 ALTERNATIVE CONCEPTUALISATIONS OF WASTE	36
2.3 TOWARDS POST-CAPITALIST ORGANISATION OF AND FOR WASTE	43
2.4 INTRODUCING A FRAMEWORK FOR POST-CAPITALIST WASTE STUDIES	74
CHAPTER 3: A METHODOLOGY FOR EXPLORING THE REALM BEYOND CAPITALISM	82
3.1 CRITICAL THEORY AS A FOUNDATION IN THE SEARCH FOR POST-CAPITALISM	82
3.2 Performing a multi-method study	85
3.3 Methods	97
3.4 ANALYSIS AND THEORISING	103
3.5 ETHICAL CONSIDERATIONS	115
3.6 CONCLUDING REMARKS	118
CHAPTER 4: THE CHARACTERISTICS AND POSSIBILITIES OF THE UK COMMUNITY WASTE	
MOVEMENT	119
4.1 CHARACTERISTICS – ACTIVITIES AND AIMS	120
4.2 CHALLENGES	134
4.3 REALISING POTENTIAL – SUCCESSES AND ACHIEVEMENTS	139
4.4 PERFORMING POSSIBILITY – PROVIDING AND RESISTING	146
4.5 THE COMMUNITY WASTE MOVEMENT THEN AND NOW	149
4.6 SUMMARY – CHARACTERISTICS AND POSSIBILITIES OF THE CWM	151

CHAPTER 5: THREE CASES OF PICKING LITTER, REUSING MATERIAL, BORROWING THINGS	154
5.1 GLANHEWCH TAIFON	155
5.2 THE REUSE COLLECTIVE	167
5.3 The Stuffotheque	182
5.4 RUBBISH, COMMUNITY AND POST-CAPITALISM	195
5.5 SUMMARY – COMMUNITY-BASED APPROACHES TO WASTE	200
CHAPTER 6: COMMONING IN COMMUNITY WASTE PROJECTS	203
6.1 MEETING NEEDS	204
6.2 BOTTOM-UP	212
6.3 COOPERATION	218
6.4 Outside the market	227
6.5 Alternative ownership	234
6.6 Reflecting on commoning	241
6.7 ORGANISATION, COMMONING AND POST-CAPITALISM	244
6.8 SUMMARY – COMMONING IN COMMUNITY WASTE PROJECT	249
CHAPTER 7: CONCLUSION – POST-CAPITALIST ORGANISATION OF AND FOR WASTE	<u>253</u>
7.1 Thesis summary	254
7.2 IMPLICATIONS FOR PRACTICE	264
7.3 A FRAME AND AGENDA FOR FUTURE POST-CAPITALIST WASTE RESEARCH	272
7.4 A FINAL WORD	277
BIBLIOGRAPHY	279
APPENDICES	<u>297</u>
APPENDIX 1: SURVEY QUESTIONNAIRE	297
Appendix 2: Interview guide	307
Appendix 3: Field diary excerpts	308
APPENDIX 4: EXAMPLE OF CODING AND CATEGORISATION MATRIX – TRC	311
Appendix 5: Consent form for interviews	314
LIST OF FIGURES	
FIGURE 2.1 THE WASTE HIERARCHY IN EU LEGISLATION	29
FIGURE 2.2 THE DIVERSE ECONOMIES ICEBERG	29 58
FIGURE 2.2 FIVE FEATURES OF COMMONING	58 63
FIGURE 2.4 A FRAMEWORK FOR MATERIALITY AND ORGANISATION	76
FIGURE 3.1 COMMUNITY-BASED APPROACHES TO MANAGING OR PREVENT WASTE	87
FIGURE 3.2 COMMONING FEATURE MATRIX	89
FIGURE 3.3 EXAMPLE OF HOW SURVEY ANALYSIS WAS PERFORMED	104
FIGURE 3.4 CODING TREE FOR SURVEY DATA	105

FIGURE 3.6 EXEMPLIFYING THE PLOTTING PROCESS	107
FIGURE 3.7 SURVEY RESPONDENTS PLOTTED ON MATRICES	108
FIGURE 3.8 CODING TREE FOR INTERVIEW DATA	112
FIGURE 3.9 THE STEPS FROM CODING THROUGH TO ANALYSIS	113
FIGURE 3.10 CODING AND ANALYSIS PROCESS EXEMPLIFIED	114
FIGURE 4.1 CWP TYPES IN THE SURVEY ILLUSTRATED THROUGH PIE CHART	122
FIGURE 4.2 THE COMMUNITY-BASED WASTE HIERARCHY	124
FIGURE 4.3 GEOGRAPHICAL MAP WITH DISTRIBUTION OF CWPS BY TYPE	125
FIGURE 4.4 VENN DIAGRAM SHOWING ORIENTATION OF CAUSE AMONG SURVEY RESPONDENTS	127
FIGURE 4.5 BAR CHART SHOWING STATED AIMS OF SURVEY RESPONDENTS	129
FIGURE 4.6 BAR CHART SHOWING HOW SURVEY RESPONDENTS CHOOSE TO ORGANISE	131
FIGURE 4.7 MAIN CHALLENGES FACING CWPS	134
FIGURE 4.8 EXPERIENCE OF ACHIEVING AIMS	140
FIGURE 5.1 BACK ALLEYS IN TAIFON	155
FIGURE 5.2 PHOTOGRAPHS OF LITTER-PICKERS AND THE SPOILS OF THE DAY	160
FIGURE 5.3 SCREENSHOT OF TWITTER POST FROM GT	161
FIGURE 5.4 ONE VIEW OF THE TRC YARD	171
FIGURE 5.5 ANOTHER VIEW OF THE TRC YARD	172
FIGURE 5.6 TREASURES IN OLD & NEW	173
FIGURE 5.7 UPCYCLED TOOLS IN OLD & NEW	173
FIGURE 5.8 PASTA MAKER PENNIE	183
FIGURE 5.9 AMPLIFIER JIMI	184
FIGURE 5.10 ME IN A SOT T-SHIRT	189
FIGURE 5.11 EMERGING MATERIALITY PRINCIPLES FOR POST-CAPITALIST APPROACHES TO WASTE	200
FIGURE 6.1 SNAPSHOTS OF SYNERGISTIC NEED-MEETING	210
FIGURE 6.2 OBJECTS, ACCESS AND OWNERSHIP	239
FIGURE 6.3 EMERGING ORGANISATIONAL PRINCIPLES FOR POST-CAPITALIST APPROACHES TO WAS	STE 248
FIGURE 7.1 12 PRINCIPLES FOR POST-CAPITALIST APPROACHES TO WASTE	265

LIST OF TABLES

TABLE 2.2 SUMMARY OF COMMONING AND EXAMPLES OF COMMONING FOR WASTE72TABLE 2.3 QUESTIONS FOR APPROACHING MATERIALITY OF WASTE77TABLE 2.4 QUESTIONS FOR APPROACHING COMMONING AS ORGANISATION78TABLE 3.1 TYPES OF SELECTION AND SAMPLING STRATEGIES AND THEIR PURPOSE91TABLE 3.2 AN INTRODUCTION TO THE THREE CASES93TABLE 3.3 ETHNOGRAPHIC PRINCIPLES95-96TABLE 3.4 TIME SPENT IN LOCATION AND WITH EACH GROUP96TABLE 3.5 NUMBER OF UK CWPS99TABLE 3.6 ALL INTERVIEWEES IN THIS RESEARCH100-101TABLE 3.7 CONTEXTUAL THEMES EMERGING FROM OBSERVATION109TABLE 3.8. STEPS IN THE CODING PROCESS111TABLE 4.1 CATEGORIES OF CWP TYPES121TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143TABLE 4.7 EXAMPLES OF HOW CWPS (CAN) INFLUENCE OTHERS144	TABLE 2.1 SPHERES OF ECONOMIC AND NON-ECONOMIC LIFE	59
TABLE 2.4 QUESTIONS FOR APPROACHING COMMONING AS ORGANISATION78TABLE 3.1 TYPES OF SELECTION AND SAMPLING STRATEGIES AND THEIR PURPOSE91TABLE 3.2 AN INTRODUCTION TO THE THREE CASES93TABLE 3.3 ETHNOGRAPHIC PRINCIPLES95-96TABLE 3.4 TIME SPENT IN LOCATION AND WITH EACH GROUP96TABLE 3.5 NUMBER OF UK CWPS99TABLE 3.6 ALL INTERVIEWEES IN THIS RESEARCH100-101TABLE 3.7 CONTEXTUAL THEMES EMERGING FROM OBSERVATION109TABLE 3.8. STEPS IN THE CODING PROCESS111TABLE 4.1 CATEGORIES OF CWP TYPES121TABLE 4.2 A SUMMARISING PORTRAIT OF THE CWM132TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEAS OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 2.2 SUMMARY OF COMMONING AND EXAMPLES OF COMMONING FOR WASTE	72
TABLE 3.1 TYPES OF SELECTION AND SAMPLING STRATEGIES AND THEIR PURPOSE91TABLE 3.2 AN INTRODUCTION TO THE THREE CASES93TABLE 3.3 ETHNOGRAPHIC PRINCIPLES95-96TABLE 3.4 TIME SPENT IN LOCATION AND WITH EACH GROUP96TABLE 3.5 NUMBER OF UK CWPS99TABLE 3.6 ALL INTERVIEWEES IN THIS RESEARCH100-101TABLE 3.7 CONTEXTUAL THEMES EMERGING FROM OBSERVATION109TABLE 3.8. STEPS IN THE CODING PROCESS111TABLE 4.1 CATEGORIES OF CWP TYPES121TABLE 4.2 A SUMMARISING PORTRAIT OF THE CWM132TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 2.3 QUESTIONS FOR APPROACHING MATERIALITY OF WASTE	77
TABLE 3.2 AN INTRODUCTION TO THE THREE CASES93TABLE 3.3 ETHNOGRAPHIC PRINCIPLES95-96TABLE 3.4 TIME SPENT IN LOCATION AND WITH EACH GROUP96TABLE 3.5 NUMBER OF UK CWPS99TABLE 3.6 ALL INTERVIEWEES IN THIS RESEARCH100-101TABLE 3.7 CONTEXTUAL THEMES EMERGING FROM OBSERVATION109TABLE 3.8. STEPS IN THE CODING PROCESS111TABLE 4.1 CATEGORIES OF CWP TYPES121TABLE 4.2 A SUMMARISING PORTRAIT OF THE CWM132TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 2.4 QUESTIONS FOR APPROACHING COMMONING AS ORGANISATION	78
TABLE 3.3 ETHNOGRAPHIC PRINCIPLES95-96TABLE 3.4 TIME SPENT IN LOCATION AND WITH EACH GROUP96TABLE 3.5 NUMBER OF UK CWPS99TABLE 3.6 ALL INTERVIEWEES IN THIS RESEARCH100-101TABLE 3.7 CONTEXTUAL THEMES EMERGING FROM OBSERVATION109TABLE 3.8. STEPS IN THE CODING PROCESS111TABLE 4.1 CATEGORIES OF CWP TYPES121TABLE 4.2 A SUMMARISING PORTRAIT OF THE CWM132TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 3.1 TYPES OF SELECTION AND SAMPLING STRATEGIES AND THEIR PURPOSE	91
TABLE 3.4 TIME SPENT IN LOCATION AND WITH EACH GROUP96TABLE 3.5 NUMBER OF UK CWPS99TABLE 3.6 ALL INTERVIEWEES IN THIS RESEARCH100-101TABLE 3.7 CONTEXTUAL THEMES EMERGING FROM OBSERVATION109TABLE 3.8. STEPS IN THE CODING PROCESS111TABLE 4.1 CATEGORIES OF CWP TYPES121TABLE 4.2 A SUMMARISING PORTRAIT OF THE CWM132TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 3.2 AN INTRODUCTION TO THE THREE CASES	93
TABLE 3.5 NUMBER OF UK CWPS99TABLE 3.6 ALL INTERVIEWEES IN THIS RESEARCH100-101TABLE 3.7 CONTEXTUAL THEMES EMERGING FROM OBSERVATION109TABLE 3.8. STEPS IN THE CODING PROCESS111TABLE 4.1 CATEGORIES OF CWP TYPES121TABLE 4.2 A SUMMARISING PORTRAIT OF THE CWM132TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 3.3 ETHNOGRAPHIC PRINCIPLES	95-96
TABLE 3.6 ALL INTERVIEWEES IN THIS RESEARCH100-101TABLE 3.7 CONTEXTUAL THEMES EMERGING FROM OBSERVATION109TABLE 3.8. STEPS IN THE CODING PROCESS111TABLE 4.1 CATEGORIES OF CWP TYPES121TABLE 4.2 A SUMMARISING PORTRAIT OF THE CWM132TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 3.4 TIME SPENT IN LOCATION AND WITH EACH GROUP	96
TABLE 3.7 CONTEXTUAL THEMES EMERGING FROM OBSERVATION109TABLE 3.8. STEPS IN THE CODING PROCESS111TABLE 4.1 CATEGORIES OF CWP TYPES121TABLE 4.2 A SUMMARISING PORTRAIT OF THE CWM132TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 3.5 NUMBER OF UK CWPS	99
TABLE 3.8. STEPS IN THE CODING PROCESS111TABLE 4.1 CATEGORIES OF CWP TYPES121TABLE 4.2 A SUMMARISING PORTRAIT OF THE CWM132TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 3.6 ALL INTERVIEWEES IN THIS RESEARCH	100-101
TABLE 4.1 CATEGORIES OF CWP TYPES121TABLE 4.2 A SUMMARISING PORTRAIT OF THE CWM132TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 3.7 CONTEXTUAL THEMES EMERGING FROM OBSERVATION	109
TABLE 4.2 A SUMMARISING PORTRAIT OF THE CWM132TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 3.8. STEPS IN THE CODING PROCESS	111
TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES136TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 4.1 CATEGORIES OF CWP TYPES	121
TABLE 4.4 OVERCOMING CHALLENGES137TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 4.2 A SUMMARISING PORTRAIT OF THE CWM	132
TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS141TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 4.3 INTRINSIC AND DIFFUSION/EXTERNAL CHALLENGES	136
TABLE 4.6 SUCCESSES BEYOND AIMS142-143	TABLE 4.4 OVERCOMING CHALLENGES	137
	TABLE 4.5 QUANTITATIVE MEASURES OF IMPACTS AND SUCCESS	141
TABLE 4.7 EXAMPLES OF HOW CWPS (CAN) INFLUENCE OTHERS144	TABLE 4.6 SUCCESSES BEYOND AIMS	142-143
	TABLE 4.7 EXAMPLES OF HOW CWPS (CAN) INFLUENCE OTHERS	144

TABLE 4.8 EXAMPLES OF HOW CWPS (CAN) INFLUENCE LAS	145
TABLE 4.9 SUMMARISING THE SERVICES THAT THE CWM PROVIDES	147
TABLE 5.1. COMPOSITION, POSITION, AND REPRESENTATION OF WASTE IN GT	163
TABLE 5.2. COMPOSITION, POSITION, AND REPRESENTATION OF WASTE IN TRC	177
TABLE 5.3. COMPOSITION, POSITION, AND REPRESENTATION OF WASTE IN SOT	192
TABLE 5.4 SUMMARISING THREE CWPS AND MATERIALITY OF WASTE	196
TABLE 6.1 NEED MEETING IN CWPS	206
TABLE 6.2 BOTTOM-UP IN CWPS	214
TABLE 6.3 COOPERATION IN CWPS	221
TABLE 6.4 MARKET RELATIONS IN CWPS	229
TABLE 6.5 ALTERNATIVE OWNERSHIP IN CWPS	236
TABLE 6.6 SUMMARISING COMMONING FEATURES IN EACH CASE	251

Abbreviations

- CBA Community-Based Approach
- CBAW Community-Based Approaches to Waste
- CE Circular Economy
- CPR Common-Pool Resource
- CWM Community Waste Movement
- CWP Community Waste Project
- CWS Community Waste Sector
- **DE** Diverse Economies
- GI Grassroots Innovation
- GT Glanhewch Taifon
- ILL Item-Lending Library
- LA Local Authority
- LPG Litter-Picking Group
- P2P Peer-to-Peer
- RWS Resource and Waste Strategy for England
- SOT The Stuffotheque
- TINA There Is No Alternative
- TRC The Reuse Collective
- Wall-E Waste Allocation Load Lifter Earth-class
- WFD Waste Framework Directive
- WM Waste Management

Acknowledgments

First and foremost, I would like to thank all my wonderful interviewees – the people that organise, participate in, volunteer for, use, and support the Community Waste Projects I have had the pleasure and privilege of engaging with. I cannot name you for anonymity reasons, but you know who you are – without you, this thesis would literally not have been possible. It is your accounts, your experiences, your stories, your thoughts, your emotions, that have allowed me to understand what it is like to organise community action on waste. A special thank you to those of you who let me into your groups and projects, who helped me organise interviews, and who took me in, to provide shelter, tea, and beer – whatever seemed to be needed at the time.

I would of course not even have made it to UEA if it were not for the unwavering belief in me (at least you never let me believe otherwise) from my amazing supervisors Gill Seyfang and Tom Hargreaves. From the first supervision meeting, all I got from you was support, reassurance, enthusiasm, kindness, and the occasional request for a Gantt chart (sorry). I once likened you to the bumpers on a bowling lane (perhaps not the most glorious of analogies) – I always felt confident that I would reach my end-goal, because I knew you'd be there to bump me along. I would also like to give a massive thank you to Joel Hull and Alun Housago from the Norfolk County Council waste team – this studentship would of course not have been possible without the generous support of NCC, but my truest gratefulness lies not in the financial realm. From early on, I was overwhelmed by your – Joel and Alun – excitement and keen interest in alternative approaches to waste. Our supervision meetings were always amazing ins and outs of academic and practice perspectives on waste and organisation. Thank you!

I have also been immensely lucky to have been part of the 3S research group at UEA. I instantly felt welcome and supported by everyone – I was also lucky to have found a crowd that was as critical of everything as I am. I am grateful to you all! A special thank you goes out to Phedeas Stephanides for showing me around UEA on my interview day, almost five years ago, and for helping me in my quest for post-docs, and everything in between; Irene Lorenzoni for your help with my survey, and for your constant positivity; and Rosalind Bark, for teaching me the basics of environmental economics, and for our many chats about academia, life and hummus.

Since I arrived in the UK, a lost little Swede with a passion for rubbish, board games and vegan food, I have found many dear friends here, without whom my experiences in this country would have been grey, to say the least. Thank you – you all know who you are! I cannot, however, ignore the fact that I found my cosmic twin on this side of the North Sea: Tasha. While you have no idea what I'm doing, and I have no idea what you're doing, we still manage to support each other. For finding you, I am eternally grateful.

I cannot write these thank you's in good conscience without naming Gavin McCrory – thank you for always being there with an enthusiasm for debating at length every topic conceivable, a folder full of methodology literature, unsolicited and solicited advice, and appropriate GIFs. I am thankful for having you as my friend.

I would also like to extend thanks to all the non-humans in my life – these are specifically the cat Lucifer, the cats Lily and Goosey, and the squirrels in my garden. Lucifer – obviously you won't understand this, partially because you're Swedish, and partially because you're a cat – I just want to say that I'm sorry for leaving you, but also that I am very grateful for having your orange fluff to hug every time I come home. Lily and Goosey – I'm honoured to be your godmother and thank you for making the lockdowns more bearable. To the squirrels in my garden, for a while you were the reason I got out of bed in the morning. Watching you dangle from our neighbour's bird feeder will stay with me forever. For these memories, thank you as well.

Till min älskade familj hemma i Sverige – även om ni inte riktigt har koll på vad jag forskar om, så har ni alltid stöttat mig. Mamma och pappa – tack för all pepp, alla paket, alla sms som börjar "Hej Fia!" – de har alltid fått mig att känna att hemma inte är långt borta. Adam och Emmett – tack för alla oplanerade videosamtal – dessa gör alltid mina dagar så mycket uthärdligare. Sanna – tack för alla snaps, alla sms, alla @s – att påminnas om vår gemensamma (och bästa) humor har gjort att England inte känns så främmande. Tack också alla mina kära vänner hemma i Svedala – ni vet vilka ni är – för stött, pepp och skratt!

Last, but far from least, I would like to thank Tim for being my constant rock, my biggest supporter, and the one who got me through all of this. Your endless encouragement and love have fuelled me through these years, and especially through these last months. Not to

mention your chilies, curries, and vegan gravies. Thank you for listening to me rage about the world, and for reminding me of the positivity we must equip ourselves with – both in the face of capitalism as well as a PhD. I could not have gotten through this experience without you beside me – so thank you from the bottom of my heart.

Preface – from Wall-E to post-capitalism

My interest in waste began when I first saw the Disney movie Wall-E in my early 20s. Wall-E, intentionally or unintentionally, contains within it a very similar critique and narrative to that which I develop in this thesis. Let me briefly lay out the plot [no spoilers]: the world has been rendered uninhabitable through the amount of waste that humans have produced following rampant consumerism. We follow a small waste robot – Wall-E – as he collects waste, squeezes it into stackable cubes, and slowly builds up skyscrapers' worth of rubbish. No humans live on Earth – it seems that very little life remains at all; the only movement we see is the little robot himself, his cockroach friend, and big jumbotrons that appear in the background. It is the latter that tells the story of what happened to Earth, some 700 years ago. All jumbotrons play messages from the same company, Buy n Large (BnL). One of the first things we hear is their jingle, which goes:

Buy n Large is your super store We've got all you need And so much more

Happiness is what we sell That's why everyone Loves BnL

The jumbotrons continue to play infomercials about how BnL's very own waste robots – the Wall-E's – will 'solve' the waste issue, which was arguably created through the consumerism that BnL fuelled and relied on. We are also told that BnL has built a giant spaceship that humanity can remain on until BnL has cleaned up Earth. As the movie is set 700 years after this spaceship left the planet, Wall-E being the only robot that remains functional, and the rubbish issue is still not solved, we understand that BnL failed. Essentially, we are told that waste is created through capitalism, and yet that capitalism is relied on for 'solving waste', something it cannot do. Without pre-empting too much of my thesis, and without spoiling the rest of Wall-E, the

solutions put forth in the movie – and here – do not rely on capitalist tools or logics, nor on technology (sorry, Wall-E), but on the collective action of humans.

Another reason Wall-E fits in this thesis is its dual narrative of doom and possibility. Without painting a completely dystopian picture of our future (which we know is not a useful rhetoric (O'Neil & Nicholson-Cole, 2009)), I do attempt to stress the seriousness of the situation humanity currently finds itself in. Beyond Covid-19 and climate catastrophe – arguably the most-talked-about threats facing humanity right now – waste appears as a challenge and problem on par with climate change. It is not its presence in the form of stackable cubes in our cities that presents this problem, but rather its presence in oceans and natural environments. Indeed, plastic can now be found in Arctic snow (Bergmann et al., 2019). Even though this might mean that we have a bleak future ahead of us, there is still hope. Both Wall-E and I think so – however, it is here that we start to diverge. Where Wall-E lays out a narrative of 'the answer is found in the future', I would instead like, very intentionally, to search for (post-capitalist) possibility and hope, not in the future, but in the present. This thesis is the result of this search.

The point of prefacing this thesis with a Disney movie is not only to highlight that humanity can overcome seemingly insurmountable challenges, if we work together; and not only to point out that there is always hope; but also to show that the critique that forms the very foundation of this research is not as rare or niche as it might appear. Indeed, this being the message of a Disney movie signals that the recognition of the paradoxes of capitalist waste management is not contained to dusty halls, but is supported more widely. My passion for rubbish also has its roots in my affinity for antagonism: even if Wall-E put waste on the agenda, waste is still often ignored, forgotten, and viewed with disgust and displeasure. These reactions to waste are precisely why it needs attention – left ignored and unchecked, we might, before long, find ourselves in the rubbish dystopias of Wall-E.

> Sara Norwich November 2021

Chapter 1: Introduction

"There is no use in trying", said Alice; "one can't believe impossible things." "I dare say you haven't had much practice", said the Queen. "When I was your age, I always did it for half an hour a day. Why, sometimes I've believed as many as six impossible things before breakfast."

(Carroll, 1871 – Alice Through the Looking-Glass)

"There are more things in Heaven and Earth, Horatio, than are dreamt of in your philosophy." (Shakespeare, 1603 – Hamlet)

There seems to be a general belief that capitalism always existed and yet somehow is the endpoint for the development of human civilisation (Olin Wright, 2010). Indeed, some have argued that "it is easier to imagine the end of the world, than to imagine the end of capitalism" (Jameson, 2003, p. 76). Like the Queen of Hearts says in the quote above, however, we need to practice our ability to see beyond this and imagine possibilities for humanity, which do not end with capitalism. *Possibility* here does not only mean that which could come to pass, it also means that which already is. Gibson-Graham (2006) state that while not all is possible, there is no rule that can tell us what is and is not. It is against this backdrop of possibility for possibility, so to speak, that this thesis departs into the complexities of waste, capitalism, and community.

Another general belief seemingly held by many is that modern day humans are incredibly wasteful (O'Brien, 2008) – from shopping until we drop, to caring little for quality and durability, relying on single-use plastics, and losing repair and mending skills – the narrative is that our grandparents were so much better than us, because they did not waste. However, *individuals* living under capitalism are actually not that wasteful:

"[It is a] false assumption that consumers in Western capitalist societies make garbage, when in fact neither do they make trash materially nor do they have much choice in what materials they buy." (Gille, 2010, p. 1050, emphasis in original) Even so, the wastes arising under capitalism are ever-increasing in amounts, complexity, difficulty in disassembling, hazardousness, as well as in terms of environmental and social impact (Moore, Arefin & Rosenfeld, 2018; Ustohalova, 2011). Every year, two billion tons of waste is generated globally (Kaza, Yao, Bhada-Tata, Van Woerden, 2018). That is 60 tons per second – during the time it takes to read this chapter, 1,020 tons of waste will have arisen. The fate of this waste is recycling (which accounts for 13.5 % of waste arisings globally), incineration (11 % globally), composting (5.5 % globally), and some form of landfill or dumping (70 % globally) (Kaza et al., 2018). In 2050, it is estimated that there will be 12 billion tonnes of plastic in natural environments (Geyer, Jambeck & Law, 2017), and that there will be more plastic by weight than there will be fish in the oceans (Ellen MacArthur Foundation, 2016). All this marine waste is also responsible for killing millions of sea birds and marine animals every year (Werner et al., 2016). Waste furthermore contributes to greenhouse gas emissions, accounting for around 5 % globally (Kaza et al., 2018).

As if that were not enough to start building a case for changing waste systems and practices, waste also has numerous human rights and health impacts. Waste exports – what some refer to as waste colonialism (Pratt, 2011; Kirby & Lora-Wainright, 2015) – are common practices, mainly from the economic centres of the Global North to the Global South. These practices are doubly unjust in that an increased waste burden is put on these countries, under conditions that make dealing with these wastes safely difficult, thus having serious implications for human health. Disease and ill-health are reported impacts from unsafe and insufficient waste handling at export destinations, arising from air, water, and soil pollution, and unsafe working conditions, both due to less regulation and legal oversight in these countries (Ustohalova, 2011). Of note is the increasing amounts of global e-waste. Millions of people in the Global South, including children, work under unsafe conditions with e-waste – something which puts them at risk of being exposed to over 1,000 harmful substances (WHO, 2021). The seriousness and urgency of both the environmental and social impacts of waste call for global changes to how waste is managed and prevented.

The global impacts of waste are highly relevant for a UK context – not only because UK citizens will, and do, experience pollution, climate change, and environmental disasters, but also because the UK finds itself amongst those nations that give rise to the most waste (Kaza et al., 2018); and furthermore happens to be the worst offender in Europe when it comes to e-waste export (BAN, 2018). Waste is of course the subject of much policy and regulation in

the UK (Defra, 2020), yet waste continues to arise and pose problems – almost as if these policies and regulations were not enough. Beyond being insufficient, questions have been posed over whether waste management strategies that are informed by capitalist logics will *ever* be able to address these waste problems fully and safely (Levidow & Raman, 2019). Indeed, it seems that the powers, logics, and perspectives that are tied up in the creation of unsustainable and unjust waste are also tied up in current attempts to 'solve waste' (Gregson & Crang, 2010). As such, it becomes clear that something else than capitalist waste management¹ is needed.

Government is not the only actor that is attempting to solve waste, however – community groups and third sector emerged in the 90s as a key actor in handling and tackling waste where government would or could not, often motivated by the perceived unsustainability and injustice in mainstream waste systems and practices (Robbins & Rowe, 2002; Luckin & Sharp, 2004; Murray, 1999; Davies & Mullin, 2012). The Community Waste Sector (CWS) (a term coined by Luckin & Sharp, 2004) proved that there are other ways of organising waste management and prevention, and that such systems and practices need not be driven by statutory responsibilities or profit, nor informed by capitalist logics. While community-based *recycling* is rarely undertaken anymore (CIWM, 2016), community-based waste *action* remains an important, yet under-researched, counterweight to capitalist waste management. Indeed, this counter-position is exactly what will be the focus of this thesis.

Coming back to Alice and the Queen – the final argument in defence of capitalism often revolves around the notion of *there is no alternative* (abbreviated TINA) (Parker, Cheney, Fournier & Land, 2014), sometimes perhaps phrased as an exasperated question – "what's the alternative, then?". Like all hegemonic ideologies, capitalism holds power over our imaginaries – it has made itself seem like the ultimate and only reasonable system (Jameson, 2003). The true challenge here lies in believing that *there are alternatives*. While the starting point for this thesis is that it is capitalism that gives rise to the complex wastes we are surrounded by as well as the insufficient attempts at dealing with these, it actually looks beyond capitalism and seeks to understand how alternatives for the future are organised in the present. It aims

¹ It should be noted that when I invoke the term *capitalist waste management*, I do not mean that waste managers and practitioners are intentionally capitalist. What I do mean is that standard waste management is informed by capitalist logics, whether waste managers like it or not, as this is what the hegemonic position of capitalism demands. However, I choose to call it *capitalist* and not only *mainstream* or *standard*, as I would like to call attention to the fact that waste management is far from impervious to the expansion of capitalist influence.

to present an answer to the question "what's the alternative, then?". The answer, however, will not be another system to end all systems, but that there are many alternatives, and that we just need to be open to the possibility of *post-capitalist* organisation. These post-capitalist alternatives for waste are presently found in the community realm, as this is the 'free-est' of capitalist influence. It also happens to be here that the challenge to deal with waste more sustainably and justly has been heeded over the past 30 years.

1.1 A frame for possibility

1.1.1 Community waste action

While certain practices and iterations of community waste action have been around for a long time, such as litter-picking, existing as an organised activity since the 1950s (KBT, n.d.), and charity shops, the first of which was opened in 1937 in the UK (McCrone, 2017), it is not until more recent decades that such actions and initiatives have grown in number and ambition. Community efforts targeting recycling and reuse for environmental reasons have mainly increased since the 90s, which can likely be accounted for by the growing amount and complexity of wastes, and an inability of regional waste management to deal with it (Murray, 1999). An additional factor in the early 90s was furthermore Local Agenda 21, which came out of the 1992 Rio Conference, urging the local scale to become involved in sustainability efforts (UNCED, 1992). Especially efforts for recycling collection, electronics refurbishment, and furniture redistribution characterised early day community waste action. Particularly recycling was done with such success that when the EU Landfill Directive came into force in 1999 (EC, 1999), obliging member states to phase out landfilling, for-profit companies started appearing, taking over recycling contracts put out by Local Authorities (Sharp & Luckin, 2006). Third sector recycling efforts continued for another decade but have now diminished to a fraction of all recycling activities, and community-based waste initiatives are now targeting other wastes with other forms of action.

It was in the early and mid-00s that the Community Waste Sector received an influx of scholarly attention. Luckin and Sharp (2003; Sharp & Luckin, 2006) were the first, and hitherto only, to map the sector in the UK. At the time, they estimated that there were more than 850 organisations in the UK that can be labelled Community Waste Projects (CWPs) (Luckin & Sharp, 2003). CWPs were defined as "non-profit-distributing organisations concerned with the

minimisation, reuse or recycling of waste" (Luckin & Sharp, 2003, p. 3), and proved to be key actors in normalising recycling, diverting material and things from waste streams, educating the public on sustainable waste management, providing jobs and local economic development, providing opportunities for local participation, and helping foster community cohesion (Luckin & Sharp, 2003). A later publication (Sharp & Luckin, 2006) asserted the importance of community action on waste but pivoted in terms of outlook – this more recent research indicated that change was in the air. As mentioned, recycling was proving to be more lucrative than imagined, and with this realisation came the advent of for-profit recycling firms (Sharp & Luckin, 2006; Murray, 1999; Levidow & Raman, 2019). Curran and Williams (2010) emphasise, however, that third sector organisations reach much higher levels of reuse than do Local Authorities when it comes to bulky waste (40 % compared to 2-3 %). They also almost always move waste up the waste hierarchy (Williams, Curran & Schneider, 2012).

Beyond characteristics, composition, and benefits, community waste initiatives have also been studied for how the public engages with and views such initiatives (Dururu, Anderson, Bates, Montasser & Tudor, 2015); how these initiatives may be evaluated (Alexander & Smaje, 2008); what role they may play for participatory democracy (Robbins & Rowe, 2002); their effects on local governance (Luckin & Sharp, 2004); and sustainable development and social capital (Luckin & Sharp, 2005). Beyond the UK, community action on waste has also incorporated e.g. Irish CWPs (Davies & Mullin, 2012), anti-waste tax campaigns (Davies, 2007) and anti-incineration campaigns, both in Ireland (Davies, 2008*a*), informal waste recovery in Canada (Tremblay, Gutberlet & Peredo, 2010) and bike recovery and repair in Sweden (Zapata Campos & Campos, 2017), to name a few. As such, there seems to be some recognition amongst community waste scholars that there is more potential to these projects other than less waste to landfill. This potential has, however, only been studied briefly, and, to date, never in conjunction with post-capitalism.

1.1.2 Commoning and post-capitalism

This research is interested in community-based approaches to waste and their potential for post-capitalism – post-capitalism, and how it may be conceptualised, thus needs an introduction. Critique against capitalism dates back at least as far as Marx (1894). Traditional Marxist analysis focuses mainly on so-called *immanent critique*, which is the process by which a system and its realisation are critiqued based on its own parameters (Stahl, 2013). Post-

capitalism, however, emerges as a productive, prefigurative, and hopeful paradigm to enter into – here, there is space not only for anti-capitalism, but also for present alterity for future organisation (e.g. Gibson-Graham, 2006). Chatterton and Pusey (2020) suggest that:

"postcapitalist social and spatial formations should inhibit the accumulation of surplus value, individualisation, commodification and enclosure, as well as build commons, socially useful production, and doing" (p. 41-42)

Following this, post-capitalist can be defined as a descriptor for something that can no longer be thought of as capitalist, i.e. something that does not rely on profit, markets, and exchange value. So far, community waste initiatives are seemingly good candidates for post-capitalism. However, community action has rarely been politicised like so, and when it has, it has been in the context of e.g. participation in local democracy (Robbins & Rowe, 2002). While this is central in any quest for justice, there seems to be a gap in the research for how such action can prefigure post-capitalist waste systems and practices. While *post-capitalism* is the overarching paradigm here, it appears perhaps so broad and vague that in order to engage with it, something narrower and more structured is needed. A form of post-capitalist organisation that can answer this need, and which simultaneously emerges as particularly useful for researching community action, is *commoning*.

Commoning has, in the past decade, emerged as a key lens through which to study alternative organisation. Its historical and conceptual origins lie in *the commons*, which were the non-owned pieces of land and water that large parts of the population subsisted from preindustrial revolution (Linebaugh, 2008; De Angelis, 2017; Fournier, 2013). Commoning has now become the preferred term, signifying the practices and forms of organising around the commons (Linebaugh, 2008; Bollier & Helfrich, 2012). This thought, concept, and lens emerges as particularly useful for the study of the post-capitalist possibilities of community waste action, for four reasons – commoning: (1) relies on collective action; (2) is a form of socially useful production and organisation, i.e. it is not only about discontent; (3) has an intertwined and antithetical history with capitalism; and (4) describes not only past forms of organising, but also forms that we might wish to bring into the future. It is indeed more radical than most community organising, but this is precisely what will be utilised as a flashlight to shine a light on post-capitalist possibility within contemporary community waste action.

1.1.3 The materiality of waste

Beyond how waste systems and practices are *arranged*, *materiality* also emerges as a key factor for how we might imagine post-capitalist waste management. In capitalist waste strategies, waste is either viewed as a *resource*, which holds value that can be utilised, or a *hazard*, i.e. the waste needs to be safely removed and contained away from society (Lane, 2011; Gregson & Crang, 2010). These views are intertwined with the logics of capitalism, and more specifically eco-modernisation agendas that emphasise either techno-market fixes (Levidow & Raman, 2019; 2020), or a focus on individuals (Bulkeley & Askins, 2009). They will lead to certain management choices, focused on large-scale, tech-heavy, market-based solutions, such as export, recycling, incineration, anaerobic digestion, and landfilling, and exclude other choices, such as localisation, community-based solutions, prevention, reuse, etc. (Levidow & Raman, 2020). When searching for post-capitalist waste systems and practices, this search must thus involve an attention to materiality, i.e. how waste is viewed, what role it plays, how it is acted on, as well as how waste itself acts on humans.

This search for alternative conceptualisations of the materiality of waste takes its starting point in sociological waste studies. While this is a broad field, Moore (2012) has argued that viewing waste as parallax, i.e. an object that seemingly changes when viewed differently, is not a theoretical or conceptual weakness, but a strength. Approaching waste as something complex, which can have multiple meanings simultaneously, will allow for a richer understanding of how it is acted on in, and acts on, human society. This adoption of waste as conceptually complex is both reflected in the understanding of waste on behalf of this research, as well as opens up for considering materiality as a factor in both capitalist and community-based waste approaches.

1.1.4 Framing assumptions

Emerging from the frame outlined so far is that this research rests on a set of assumptions. The first assumption is that it is within the community realm that most post-capitalist possibility can be found. This appears from a simple form of deduction: the market is a central mechanism, tool, and space in capitalism, so it is not here that post-capitalism will be searched for. The state, on the other hand, has an important role to play for the future, both in terms of preventing capitalist-induced ecological collapse, as well as in supporting the ushering in of more sustainable and just forms of democracy and service provision (Chatterton & Pusey,

2020). Yet the state remains tied to the ideological hegemony of capitalism – one of its core tasks is the protection of private property and ensuring that market transactions are (on the surface) fair (Polanyi, 1944). As such, the state is also not the sphere where post-capitalist possibility will be sought. There is of course also a case for looking to the micro-level, i.e. individuals, beliefs, choices, and practices (Schmid & Smith, 2020). While this could indeed contain such possibility, *service provision* and *social relations* cannot be intentionally arranged from the isolated acts of individuals. As such, what remains is the third sector and community. Now these are of course broad, diverse, and contested sites, but they are here understood more for what they are not, than for what they are: non-state, non-market collective action.

The second assumption is that alterity to capitalism in terms of waste will only be truly engaged with through the simultaneous attention to both organisation and materiality, as capitalist waste management is not only a question of organisation. It is precisely because waste is the material in question that materiality emerges as a key factor – waste has a certain ability to vex, upset, disgust (Hawkins, 2006); its presence signals failure and uncleanliness, its absence signals wholeness, civilisation, purity (Douglas, 1966; Hawkins, 2006); waste can also become a reminder of imperfect and insufficient capitalist conveniences (Moore et al., 2018). Simultaneously, capitalist waste perspectives do little to engage with the insurmountable imperfections and planetary threats that waste creates - indeed, its claims to glory lie in smoothing over these imperfections to hide what is underneath (Moore, 2012); to contain, rather than solve (Gregson & Crang, 2010); and to recast as unproblematic, since waste can be a resource that can be fed back into the production of evermore stuff (Hultman & Corvellec, 2012). Arguably, it is perspectives such as waste as resource or waste as hazard that inform subsequent organisation of said waste - for example, if waste is a resource, then it would be logical to organise large-scale recycling collections to obtain that value. As other capitalist logics are tied up in these operations, these collections are often outsourced to for-profit firms (Levidow & Raman, 2020). Under capitalist conditions, all these actions and motivations are logical and preferred, since they 'solve' the waste problem and simultaneously create more capital – however, they also prevent other solutions from seeming possible and from being implemented (Levidow & Raman, 2020). It is for these reasons that materiality - i.e. the role of, and perspectives on, waste – are interrogated alongside organisation.

The third and final assumption that this thesis departs from is that alterity and possibility will only be gleaned from present community action if radicality is actively sought.

The assumption is furthermore that alterity to capitalism and possibility for post-capitalism can be simultaneously pursued through the application of commoning, as this emerges as both antithetical and positively prescriptive in itself. It should be mentioned that it is not impossible (arguably a forbidden word here) to find alterity and possibility in other ways, but community action has hitherto remained relatively depoliticised, and is often only celebrated for its successes on the surface. Through intentionally searching for radicality, this action is (re)politicised and queried for what other hidden potentials it contains, features it exhibits, and motivations and logics that might drive it.

1.2 Approaching community, waste, and post-capitalism

Several areas within these fields show gaps, undiscovered potential, or a need for revision or update. Specifically:

- Research on community waste initiatives needs updating. As the last proper mapping
 was undertaken more than 15 years ago, this field needs a check-up. Furthermore,
 recent developments and changes in the environmental agenda (notably *The Attenborough Effect* (McCarthy & Sánchez, 2019)) as well as in political, academic,
 public and community interests (in e.g. the sharing economy) mean that the academic
 understanding of the community-based waste initiatives is in need of modernisation
 for example, litter-picking and item-lending libraries emerge as novel and
 rediscovered forms of organising of and for waste. These have, to date, not been
 studied in conjunction with the CWS.
- 2. A structured approach to critical commoning studies is lacking. While I argued that commoning is narrower and more structured than its overarching paradigm post-capitalism it is still challenging to apply as a conceptual and analytical tool. There is, as such, a case for developing a more systematic framework for studying commoning as a form of alternative organisation.
- Commoning has only rarely been applied to waste before. Only a few works exist to date, notably Lane (2011), Gidwani (2013), and Zapata Campos, Zapata and Ordoñez (2020). This is not entirely surprising, as commoning is most often concerned with 'positive' and productive activities, such as food growing, food distribution, housing,

care, technology, and more. As such, this holds undiscovered potential in providing new insights into both commoning as well as community organisation of and for waste.

- 4. Materiality and organisation of waste have to date not been combined. To the best of my knowledge, simultaneous attention to materiality and organisation for the uncovering of post-capitalist possibility has to date not been performed. This further asserts the need for a new field of research: post-capitalist waste studies.
- 5. Community action on waste as prefiguring post-capitalist possibility is an unexplored avenue. There has, to date, not been any research on the connections between community action and post-capitalist possibility for waste, nor any research on how waste might be organised under post-capitalism. At the near-precipice of capitalist waste generation, this research thus timely addresses the elephant in the room: if and how waste can be sustainably and justly organised outside and after capitalism.

While the introduction to this chapter painted a relatively gloomy and depressing picture of a present and future that is indeed compatible with various dystopian waste narratives (such as Wall-E), this is not the story that will be told here. Clearly, previous research on community waste action highlights that there *are* people and groups that are willing to go the extra mile and take action on something they perceive as unjust or unsustainable. And as both the Queen and Hamlet allude to – if we do not dare to imagine and be open to the possibility that *there are alternatives*, we will not find those alternatives. Furthermore, we are most likely to find these alternatives and possibilities in the community realm – suggesting that community – or perhaps waste itself – can act as a gateway to (all) good things. This research will address the above gaps, and simultaneously support the normalisation of imagining that which might seem impossible. The research aim of this thesis is, as such:

Research aim: To uncover if and how community action on waste carries postcapitalist possibility.

In reaching for this aim, this thesis addresses calls made on how to mobilise alternative imaginaries as well as how we imagine other futures for waste (Levidow & Raman, 2020). It

also addresses such calls as those made by Chatterton (2016): "[further] work would do well to focus on the novel social and spatial commoning practices to gain more insights in terms of how decommodification, mutualism and self-management play out, as well as their limits and potentials" (p. 412); as well as the challenge identified by Schmid (2019) – to overcome the belief that societal change is impossible. In so doing, this thesis will also address the research gaps and possibilities outlined above. The following research questions will each advance the research aim:

RQ1: What are the characteristics and possibilities of the UK Community Waste Movement?

RQ2: What is the role of, and perspectives on, waste in Community Waste Projects, and what are the implications for post-capitalism?

RQ3: How is commoning practiced in Community Waste Projects, and what are the implications for post-capitalism?

In order to address this aim and these questions, and close the gaps highlighted above, this research is undertaken as a multi-method study, informed by critical theory ontology and epistemology. Specifically, this research is organised as follows:

- 1. A deep reading of commoning literature, and formulation and compilation of a conceptual commoning framework, to aid and structure sampling and analysis.
- 2. A mapping survey, targeting Community Waste Projects. This questions characteristics, including aims, successes, challenges, and more. The data is used to address RQ1. This survey also provides the sampling pool for the case study stage.
- Three in-depth case studies of Community Waste Projects, to add depth to RQ1 and address RQ2 and RQ3. Methods are mainly semi-structured interviews with complimentary context observation. The cases are:
 - a. Litter-picking group Glanhewch Taifon
 - b. Community reuse hub The Reuse Collective
 - c. Item-lending library The Stuffotheque

The empirical, theoretical, and academic context, along with rationale and research aim, have now been introduced. What ultimately remains in this chapter is the provide an outline and overview for the rest of this thesis.

1.4 Outlining what is to come

The need for a different approach to waste has been established in this chapter. Chapter 2 provides the theoretical foundation for this thesis, and further asserts the need – and possibility – for a post-capitalist approach to waste. It begins by delving deeper into mainstream approaches to waste, how waste is governed, and which perspectives and logics are dominant here. The chapter then continues to alternative conceptualisations of waste, meaning how waste can be, and is, understood, viewed, and related to, in ways that are not as narrow as *resource* and *hazard*. After it has been established that waste is a conceptually complex object, post-capitalist forms of organisation are given attention. A multiplicity of varyingly politicised approaches is covered here, starting with community, community-based approaches to waste (CBAW), grassroots innovation (GI), diverse economies (DE), and commoning. These are viewed as belonging to the same paradigm but cover different aspects of alternative organisation. Commoning, however, is viewed as the ultimate and, for this research, most useful concept. The chapter is ended by presenting the dual framework that is used to interrogate materiality and organisation for uncovering post-capitalist possibility.

Chapter 3 follows by outlining the methodological underpinnings and chosen methods for approaching community, waste, and post-capitalism. It positions this research within the school of critical theory to emphasise the normative standpoint and emancipatory values that have guided me on this journey. It then details the multi-method study – from the mapping survey, to the process of finding cases, to undertaking case research. Methods and analysis are given thorough attention, lastly followed by the ethical considerations that have guided this research. This chapter also discusses the normativity inherent in research projects concerned with sustainability and justice, asserts the transparency of this particular research, and justifies the need for research that attempts to change what it finds, should it be unjust or unsustainable. Chapter 4, as the first results chapter, addresses RQ1 by presenting the survey results and discussing them in relation to the emerging potential of the Community Waste Movement. The movement is mapped based on its characteristics, aims, challenges, successes, as well as how groups here have managed to influence those around them. The CWM is thus examined from multiple angles and viewpoints – this is presented through a series of graphs, tables, and illustrations. The chapter continues with a taster for how community action on waste might be gently politicised through the concept of performing possibility. It then ends with a summary of how the CWM has changed over the past two decades. Throughout the chapter, community action on waste is also discussed in relation to grassroots innovation.

Chapter 5 serves the triple purpose of introducing the cases under study in this research – the litter-picking group, the item-lending library, and the reuse hub – adding additional depth to RQ1, as well as addressing RQ2. The chapter is divided according to case – the cases are described through context, history, activities, and vision and outlook. These aspects were chosen as they provide insights into the contexts, challenges and motivations that have shaped each initiative into what they are today, as well as how what role they might play in the future. This marks the end to the case introductions and addressing RQ1. Following this, RQ2 is addressed for each case by examining the perspectives on, and roles of, waste. This initiates the first part of the dual interrogation of materiality and organisation that this thesis employs. This chapter is ended by a discussion on the implications for post-capitalism of the waste perspectives and roles that are present in community action. Within this, principles for post-capitalist waste strategies start taking shape.

Chapter 6 addresses the final research question – RQ3. The qualitative data from the case research is still used as the empirical base, but these are allowed to play proxy for Community Waste Projects more generally. Commoning here takes centre stage – each feature of the outlined framework is given attention in order, highlighting if, to what extent, and how community action on waste can be understood as commoning, as well as when it cannot. After each feature has been examined in depth, this chapter also turns to the implications for post-capitalism. An additional set of principles is introduced, this time paying attention to organisation instead of materiality. The chapter ends with a discussion on a theme that emerges throughout Chapter 6 – namely that radical action on waste strategies.

The final chapter summarises the thesis, answers the research questions in order, and synthesises the insights generated here. The novelty and original contributions are revisited and outlined, followed by attention to a series of implications for practice, both for community waste initiatives as well as Local Authorities. It then continues with the assertion for a new research agenda – one which has been initiated and tested through this research – post-capitalist waste studies. This agenda is outlined by a set of principles that such studies need to heed, along with identified next steps. This chapter, and as such, this thesis, ends with a final word to send the reader off with hope and a sense of possibility.

Chapter 2: Towards a framework for postcapitalist waste studies

This chapter will provide the theoretical foundation and framework on and through which I will advance the main argument of this thesis. It will situate my research within two hitherto relatively disconnected bodies of work: waste studies on the one hand and post-capitalism and commoning on the other. First, Section 2.1 will cover the current waste system, i.e. how waste is presently governed and managed. It will show that waste in its current forms arises in spite and because of mainstream/capitalist waste management, and that waste management strategies within this paradigm are characterised by marketisation, technooptimism, and individual responsibility and behaviour change. To provide a counterweight to these perspectives, Section 2.2 situates waste as a complex object, which has nuanced characteristics and symbolisms. Reviewing a plurality of approaches and conceptualisations of waste that extend beyond standard, capitalist understandings, such as waste being transient, constitutive, and symbolic, firmly asserts the relevance of engaging with materiality and accompanying imaginaries. When mainstream and alternative approaches to waste have been covered, Section 2.3 introduces post-capitalism as the overarching frame within which alternatives to state and market sit, specifically alternatives for waste. It begins in the realm of community-based approaches (to waste), followed by grassroots innovations for sustainability and diverse economies. It ultimately culminates in commoning, which is used as a lens for fruitfully engaging with present alternatives for sustainable and just futures. Section 2.4 then presents the analytical frameworks that are used in this thesis in order to engage with empirical cases of alternative waste organisation. Section 2.4 also closes this chapter by presenting and situating my research questions and how this thesis will contribute to a new understanding of alternative ways of organising (of and for) waste.

2.1 Mainstream approaches to waste

While waste has accompanied humanity since time immemorial (O'Brien, 2008), it is not until more recent centuries that it has posed a problem. Some wastes, such as food scraps, are

inevitable for all biological beings, but the complexity and quantity of waste generated by humanity has now reached levels of imminent unsustainability. It is estimated that by 2050, under a business-as-usual scenario, the world will create 3.4 billion tonnes of waste per year (Kaza, Yao, Bhada-Tata & Van Woerden, 2018). Simultaneously, the world is experiencing continued neoliberalisation and expansion of capitalist influence and market order (Harvey, 2005; Fletcher, Dressler & Büscher, 2015). Waste is not impervious to this expansion – indeed waste and capitalism are complexly intertwined, and capitalist approaches to waste have become mainstream (Gille, 2010; Moore, 2012; Moore, Arefin, Rosenfeld, 2018; Lane, 2011; Murray, 1999). These approaches to organising waste share the endorsement of both state and market actors, as they fall under a wider umbrella that attempts to marry economic growth with sustainability (Levidow & Raman, 2019). Most of these approaches share two partially contradictory views of waste: waste as hazard and waste as resource (Lane, 2011). Even so, they both fit with the imaginary that waste is and should be the object of a centralised, technological, industrial machinery (Levidow & Raman, 2020); that there is much economic opportunity to be harnessed (Gregson, Watson & Calestani, 2013); and that, paradoxically, consumers are key to creating change (Van Veelen & Hasselbalch, 2020; Defra, 2018). I view this paradoxical state as a system – not in the sense that it has been planned to run smoothly, but in the sense that it is an emerging totality that reproduces itself. The unsustainability produced by this system is thus created both in spite and because of how waste is managed. This section outlines this system in three steps: first, waste as a sustainability issue is briefly introduced. Second, current international, national, and local policies and regulatory frameworks are explored, i.e. how waste is governed and managed. Lastly, attention is brought to the characteristics and guiding logics of this system, meaning how and why its policies and its operation end up creating unsustainability in the first place. This also includes how perspectives on waste (resource and hazard) are intertwined with how waste management is organised, which role waste plays in the system outlined above and in society, and the outcomes of viewing waste in specific and narrow ways.

2.1.1 Waste arisings and sustainability

Humanity creates ever-increasing amounts of rubbish. In 2016, UK households, commerce and industries generated 187 million tonnes of waste. Of this, households are responsible for 22,8 million tonnes (Defra, 2020). Globally, humans generate more than two billion tonnes waste

per year (Kaza et al., 2018). Landfilling accounts for 24 % of the UK's total waste arisings with an additional 9 % used as 'backfill' in e.g. closed mines or as landscaping material in 2016 (Defra, 2020). Incineration accounts for 6 %, while 48,5 % of all waste arisings are recycled. Beyond domestic management, certain wastes are also legally and illegally exported from the UK and other European countries to poorer countries. This is often a grey zone in legislation, as it is currently legal to export e.g. plastic waste if the intention is to recycle or recover it (incinerate) at its destination (Interpol, 2020). Other wastes, such as e-waste, are also exported, mainly illegally, from most European countries. It is estimated that the UK exports around 209,000 tonnes of electronic waste to countries in the Global South per year, making the country the worst offender in Europe (BAN, 2018).

The UK and the world also experience rogue materials, littering and fly-tipping. While litter is difficult to measure, Keep Britain Tidy estimates that 14 % of all areas used by humans in England are not meeting an acceptable standard for cleanliness (KBT, 2018). On a global scale, 8,3 billion tonnes of plastic have been produced since the 1950s (Geyer, Jambeck & Law, 2017). 9 % of this has been recycled, 12 % has been incinerated, and the rest – 79 % – is assumed to remain: some of it in homes and industries, but mainly in landfills or natural environments. It is estimated that under current production and management conditions, 12 billion tonnes of plastic will exist in landfills and natural environments, such as forests, lakes, and the oceans, by 2050 (Geyer, Jambeck & Law, 2017).

The environmental impacts associated with waste and how it is managed are manifold: landfilling waste releases methane, a powerful greenhouse gas (Levidow & Raman, 2020); incinerating waste releases carbon dioxide and, to a certain extent, dioxins (highly toxic, persistent organic pollutants) (Dijkgraaf & Vollebergh, 2004); landfilling and incinerating waste leads to continued pressure on extracting and producing new materials and items; recycling, while lowering that pressure, also uses energy for its operations; marine plastic pollution is estimated to kill and harm millions of sea birds and marine animals every year (Werner *et al*, 2016); 5 % of global GHG emissions are due to waste management (Kaza *et al*, 2018), and so on. The sustainability implications of waste are, as such, severe.

2.1.2 Current waste policies and practice

As stated, waste arisings and its associated environmental impacts – notably greenhouse gas emissions and plastic pollution – happen *in spite* and *because of* how waste is viewed and

managed. To attempt to manage the negative impacts outlined above, waste is governed on multiple levels, and through a multitude of national and international organisations (Davies, 2008*b*). Internationally, waste is governed through e.g. the Basel Convention on hazardous and other wastes (UNEP, 2011); on an EU level through the Waste Framework Directive (WFD) (EC, 2008), which is set to remain in UK legislation post-Brexit (Defra, 2018); nationally through e.g. the Resource and Waste Strategy for England (Defra, 2018); and on a Local Authority level, where waste is physically managed and treated (Defra, 2018).

Most influential for the UK context is the European Waste Framework Directive (WFD), which adopts the waste hierarchy. This hierarchy is now written into the legislation of every EU country (EC, 2008), including the UK (Defra, 2018). The waste hierarchy (see Figure 2.1) stipulates the preferred order of waste management options: from prevention, through to (preparing for) reuse (preparation meaning any action to facilitate the reuse of a product or component, e.g. cleaning, repairing etc.), recycling, recovery (which means e.g. incineration, waste-to-energy, biogas production etc.), and lastly to landfilling (EC, 2008). While this has been accompanied by concerted, and often successful, efforts to increase recycling rates across Europe (Bulkeley, Watson & Hudson, 2007), the waste hierarchy emphasises industrial and technological disassembling processes, and as such, the position of waste as something to be managed centrally and industrially has been increasingly cemented (Hultman & Corvellec, 2012).



Figure 2.1. The waste hierarchy in EU legislation (EC, 2016).

Recycling, recovery, and disposal are three types of industrial processes, which are only available to large-scale, centralised systems that can employ heavy-duty, complex machinery. The second-most preferred option – reuse – has been labelled "the neglected child of the waste hierarchy" (CIWM, 2016, p. 5), which is likely a result of it not being conducive to profit and promising markets. Waste prevention – the final step – while being challenging to promote in general (as it encourages *less* of something) and under capitalism in particular (as there is no growth or profit to be made from abstinence of production), has received more attention than reuse, but mainly as a way to make production more efficient and less wasteful (Bartl, 2014). As such, it is still conceived of in the context of complex and industrialised systems and focuses on processes that reduce harmful substances impacting the environment as well as any measure that results in *less* waste, e.g. a thinner film of plastic (Bartl, 2014).

The waste hierarchy infuses all European member states' (and the UK's) waste strategies and regulations (EC, 2008). In the UK, waste is in turn governed in its constituent countries. In England, for example, the Resource and Waste Strategy for England (RWS) lays out principles for guiding national and local waste policy (Defra, 2018; 2021). Local Authorities, in turn, organise waste planning, collection and treatment, often with aspects of this process outsourced to private contractors (Levidow & Raman, 2020). The type of waste-related works undertaken at the LA level is most often focused (partially by necessity) on industrial processing and disassembling of waste, but also includes other measures, schemes and campaigns to move waste up the hierarchy. Behaviour change avenues are still considered one key tool for LAs to improve recycling targets (Defra, 2018), but many local governments also support or create schemes intended to encourage and facilitate reuse and repair, often of bulky waste items, such as furniture (LGA, 2014). Some also support other communitybased waste projects such as community composting groups (Slater, Frederickson & Yoxon, 2010). This kind of non-industrial waste work, however, is rarely reported or studied, revealing a gap both in the communication about this work to the public, as well as a gap in the research. Levidow and Raman (2020) further observe that industrial-focused fixes, especially on a LA level, often crowd out and displace so-called eco-localisation agendas, indicating that while both could theoretically co-exist, this rarely happens in reality. Although community-focused initiatives are not completely lacking from the LA agenda, the fact remains that "centralised policy-making structures [...] construct the local scale as predominantly a site of policy implementation rather than innovation" (Davies, 2007, p. 69-70).

Ultimately, the complexity of the types and combinations of materials in contemporary waste – and the challenges that arise due to this complexity – has not resulted in efforts to simplify these types and combinations, but rather in efforts of equal complexity (Hultman & Corvellec, 2012), i.e. centralised, industrial processes of disassembling. Technologies of this level of complexity and scale, however, serve to disconnect citizens from the management and impacts of the materials they use and their wastes (Hultman & Corvellec, 2012). While necessary to manage complex wastes, these techniques also serve another order: the market order. The next section will introduce and examine three key characteristics of the capitalist waste management paradigm: 1) marketisation and market order, 2) techno-centric solutions, and 3) a focus on individuals and behaviour change.

2.1.3 Waste and market order

The first characteristic of mainstream waste management is the increasing level of marketisation present in strategies, policies, and management choices. An expanding market order is observed in all areas and sectors of society and human life (Fletcher et al., 2015), including waste. Firstly, waste is inevitably coupled with capitalist production. At capitalism's core sits continued growth and profit accumulation, and for this to happen, more must be produced and consumed (Meretz, 2012), thus offering very little incentive to slow production, which logically results in continuous waste streams. Another route that connects production to waste is *planned obsolescence*, which is defined as a "business strategy in which the obsolescence (the process of becoming obsolete) of a product is planned and built into it from its conception, by the manufacturer" (Kramer, 2012, p. 13). Waste is thus both a by-product of production and consumption, as well as an integrated and inevitable part of this cycle: the economy needs to grow, meaning we need to continuously replace things we have already bought, regardless of if they are still functional or not.

The expansion of market logics, however, largely becomes visible once the waste has been created and thus needs to be handled. In the UK, the private sector has, since the beginning of the 2000s, been invited to manage waste on behalf of state actors (Levidow & Raman, 2020), introducing seemingly useful logics into the system, such as cost-cutting and efficiency. This has, however, had the effect of both prioritising cost and profit over environmental sustainability, distributing responsibility across a more decentralised range of actors (Levidow & Raman, 2019), and crowding out more localised solutions and agendas, as mentioned (Levidow and Raman, 2019).

Waste itself is also traded on domestic and global markets, not only to store, but also for recycling and incineration (Kennedy, 2007). National and international policies and frameworks that encourage recycling are seen as leading to new business sectors continuously developing and expanding – these include not only the recovery of material, but also the trading of waste between countries (Interpol, 2020). The EU's efforts of writing the concept of Circular Economy into its directives are indeed a direct attempt to curb this waste trade and thus value leakage from the Union, as waste is cheaper to deal with outside of Europe (Gregson, Crang, Fuller & Holmes, 2015), while governments claim that it is due to domestic capacity constraints (Interpol, 2020). Marx (1894) theorised that it is only when prices of new materials rise to the point of rivalling the recovery of used materials, that waste will be managed under capitalism. In a globalised world, an addition to this is the cheap and sometimes illegal export to countries with little environmental regulation and social protection, which renders management and containment cheaper in these places than in the Global North. The service that is sold on these global markets is mainly space for storage of waste. This is in line with what Harvey (2001) termed the spatial fix, meaning capitalism's tendency to try to 'fix' itself by spatially expanding and ordering: waste cannot be dealt with domestically, but it can be shipped to the Global South. Waste, when considered a non-human actor, might also come to be 'dealt with' if and when it is considered a threat to capitalist production (Collard & Dempsey, 2017), i.e. if it threatens e.g. health and safety:

"Conventionally, waste is treated as irrelevant to production, only to be managed when the pressure to handle the problem is greater than the convenience of disposal. The catalyst to manage the problem eventuates when the waste disposal impacts (polluted air, water or full landfills) affect people." (Seadon, 2010, p. 1639)

Thus, waste is inextricably intertwined with market logics: its creation is inevitable as long as production is guided by profit; its domestic management is infused with an order that prioritises financial gains over environmental impacts; and the Global North would rather send their wastes to the South than pay to deal with them 'at home'. Especially the latter has received critique over the years as a form of neo-colonialism (Kirby & Lora-Wainwright, 2015),

where the effluent of the core is dumped on the periphery. As noted, the EU has written Circular Economy into its directives (Gregson et al., 2015). This could be argued to be an attempt to curb unjust and unsustainable waste dumping, but more likely stems from its compatibility with capitalism.

2.1.4 Techno-market fixes

The second identified characteristic of mainstream waste strategies is the focus on, and optimism around, technological and industrial solutions, and how these interact with marketisation. Both waste management and economic growth can be strived for separately, but the ultimate attempt to marry these comes through Circular Economy (CE). This idea encourages producers and legislators to, through design, production and end-of-life management, close material flow loops to extract as much value as possible from material and waste resources (Ghisellini, Cialani & Ulgiati, 2016; Ellen MacArthur Foundation, 2012). It is written into most EU commercial, industrial, and environmental frameworks and directives (EC, 2019), and is one of the key tools in England's Resource and Waste Strategy (Defra, 2018). While there is potential for radicality within notions of circularity, CE is mainly viewed as a business model, which is specifically interesting to industrial and policy actors (Ghisellini, Cialani & Ulgiati, 2016). CE is further viewed as a timely tool to decouple material input and environmental impacts from economic growth (Gregson et al., 2015). Gregson's et al. (2015) analysis shows that the CE project is inherently normative and is driven by discourses of ecological modernisation, which hold that economic growth and environmental sustainability are compatible. CE has further been critiqued for de-politicising capitalism's creation of waste (Valenzuela & Böhm, 2017).

Approaches to waste that focus on businesses and industrial processing, which includes CE, have been labelled 'techno-market fixes', following ecomodernist lines of thinking (Levidow & Raman, 2019; 2020). These have been shown to exclude and trump other imaginaries and critical perspectives, such as those that emphasise localisation (Levidow & Raman, 2020). Through ecomodernist thinking, waste has seen an ontological broadening from only *hazard* to *resource*, which sits well with capitalist, market-centric, techno-fix imaginaries. Even so, metamorphosing the waste system to an economic sector, adopting concepts such as CE and increasingly relying on industrial processing and disassembling have not had the revolutionary effects predicted (Levidow & Raman, 2019; Hacking & Flynn, 2018;

Hultman & Corvellec, 2012; Hobson, 2015). Limits to technological innovation and possibility (for example the lower quality of recycled plastics compared to new plastics), value leakage (i.e. it is more profitable to export waste to the Global South than manage it within the EU) and resistance from local populations and critical voices have limited the success of this project (Levidow & Raman, 2019; 2020; Gregson et al., 2015). Furthermore, the belief that the waste that modern society creates could ever be fully and sustainably treated is a fantasy, which has been created through the ontological shift to waste as resource – "...waste still remains; and it does so because treatment technologies are not, in material terms, disposal technologies – as they are presented – but rather transformative technologies and storage/container technologies" (Gregson & Crang, 2010, p. 1029). A process such as recycling is, for example, not enough from a true circularity point of view – as long as this takes place in a system that relies on continued growth, it will only ever be a partial solution (Brand & Wissen, 2021). As such, even recycling, which inhabits this complex middle-ground of being a necessity, but not quite a solution, feeds into the myth that capitalist wastes could ever be managed sustainably.

2.1.5 The individual as change-point

The third and final characteristic of capitalist waste approaches identified for this thesis is the focus on the individual as a change-point. While most efforts to manage waste are heavily industrialised and centralised, some avenues used and promoted by governments and industries are softer: behaviour change (Clapp, 2012). This aligns with the narrative that it is *individuals* that are wasteful (O'Brien, 2008; Collins, 2020; Defra, 2018). In waste policy, citizens are often viewed as consumers (cf. Defra, 2018) – actions available to citizens are thus focused on their consumption and related practices. In England's Resource and Waste Strategy, for instance, consumers will be given more information on the sustainability of their purchases, and they will be encouraged to reuse and recycle more (Defra, 2018). While consumers are not the only ones in focus in the RWS (business and government are also seen as key actors), previous waste policies have also attempted to shift responsibility onto the individual (Bulkeley & Askins, 2009; Wheeler, 2014). A focus on individuals has, however, been criticized for lacking efficacy, especially in a complex system such as the globalised waste and material networks (Van Veelen & Hasselbalch, 2020). Positing the individual as the unit of analysis and as the change-point further fits in with neoliberal, capitalist ideology, where the

state mimics the market, gives information and nudges, and refrains from wielding harder legislative power, but is otherwise shrunk (Leggett, 2014; Peck, 2010, McGuigan, 2014). On the opposite end, consumers are not encouraged to 'buy less stuff', because while it could have a significant effect on waste arisings and lower environmental impact in general, it does not lead to economic growth and profit accumulation (Hawkins, 2006). Citizens – consumers – are, as such, encouraged to waste less, but shop more, a paradoxical state that is bound to leave people confused.

2.1.6 Summarising mainstream approaches to waste

What connects these different approaches - state-led waste collection and management, market-led waste trade and export, and consumer-'led' waste minimisation - is that they are infused with, shaped by, and the results of capitalist logics. These emanate from capitalism's core values and aims: continuous economic growth for the sake of profit accumulation, protected by a small state apparatus that endorses and employs measures that manage waste on the surface, but still allow this problematic economic growth to take place, and where collectives of humans are viewed as obsolete and the individual is hailed as the ultimate unit. These approaches are argued to manage waste, prevent waste, limit environmental bads from waste, however, it is clear that they are insufficient and even paradoxical. Even so, they form a system, a totality, which emerges as a patchwork that is still guided by an overarching set of logics. While it should, from a pragmatic perspective, be acknowledged that waste *does* arise, that it needs to be managed to avoid the dystopian scenarios depicted in various films and books (e.g. Wall-E), and that local governments can only do so much, parts of this planet are still well on their way to resembling the literal wastelands and wastewaters of dystopia. This is happening, as stated, not only in spite of attempts at managing wastes, but also because of the way waste is viewed and treated – waste is seen as a hazard that needs ridding (the logical management choice is then landfilling or incineration), waste is seen as a resource that needs extracting (the logical management choice is thus incineration, recycling, and only sometimes reuse), and yet waste is also disconnected from the complex systems, networks, and materials flows that span the globe, which means individuals can be viewed as possible and important change-points. Due to waste's increasing complexity, a globalised and more connected reality, and the fact that humanity is running out of space to store our waste, the limits to, and shortcomings of, capitalist waste management are becoming increasingly difficult to ignore.

As is evident by these limitations and shortcomings, where efforts for change are driven by the same logic that created the problems in the first place, something else is urgently needed. That *something else* needs to pay attention both to the materiality of waste (i.e. how it is understood, which role it plays, how society and waste management are shaped because of it, as well as what it hides and shows) as well as the organisation of and for that waste (i.e. how is it managed, where is it managed, to what end is it managed, and so on). As this research is guided by ideals of sustainability and fairness, that *something else* also needs to emphasise, promote, and make visible, real-world and possible, alternatives to capitalist waste management. Section 2.2 picks up the first thread – alternative conceptualisations of waste that broaden our understanding of waste from only hazard and resource (Lane, 2011) to a more complex and nuanced object (Moore, 2012) – and section 2.3 deals with the second – post-capitalist organisation in general, and of and for waste in particular.

2.2 Alternative conceptualisations of waste

The previous section highlighted the many paradoxes, intricacies, and negative impacts of capitalist waste management. Even so, waste is rarely viewed as something other than hazard or resource under capitalism, i.e. something to rid society of or something to utilise for profit and business opportunity (Lane, 2011). Any search for sustainability and justice must look beyond these categories. As this research is interested in community-based approaches to waste, a more nuanced perspective that is able to look deeper will be adopted. However, while waste has been the object of much theorisation and social scientific scrutiny, no single perspective exists that can sufficiently allow for the complexities and subtleties found on the ground. What does exist is a diverse cornucopia of research and thought on the nature of rubbish in itself as well as in relation to a myriad of other objects and phenomena. Hird (2012) keenly observes: "Waste is an inherently ambiguous linguistic signifier: anything and everything can become waste, and things can simultaneously be and not be waste, depending on the perceiver" (p. 454). Indeed, everything from unused land to potential, from time to plastic, can be waste or be wasted. While this says something about our relation to the word waste, the focus of this research is still the kind of material and things that we discard or intend to discard. The following pages introduce waste as a complex object, which has a range of characteristics – constructive and constitutive, dynamic and transient, and symbolic and

representative. Highlighting these aspects of waste can allow for a more nuanced and deeper engagement with the materiality and effects of waste.

2.2.1 Waste as a conceptually complex object

The generation and presence of waste have disgusted many throughout human existence. Especially in areas where humans have gathered, such as cities, has waste posed a problem. In 1912, Luther Lovejoy, a secretary at a housing association in the US, wrote on the creation of waste:

"The accumulation of garbage and rubbish is one of the penalties human society inevitably pays for the luxury of civilization. The immeasurable privilege human beings enjoy of living together in society carries with it the certainty of the inconvenience and sometimes peril involved in the presence of large aggregations of waste matter, animal, vegetable and mineral." (Lovejoy, 1912, p. 62)

This positing of waste as inevitable is, however, not shared by all waste scholars – even so, it is not a question of whether there will be waste or not, but a question of how we construct waste in the first place (Gregson & Crang, 2010). Gregson and Crang (2010) write: "waste is a long way from stuff that 'just is', but rather it becomes" (p. 1028). Adopting the position that our understanding of waste is constructed, and that this construction will have effects on what we do with waste, is not an approach to waste per se, but rather a meta-narrative of rubbish. To unfold alternative approaches to, and constructions of, waste, I follow Moore's (2012) conceptualisation of waste as a complex object and as a *parallax object*, as that which disturbs "the smooth running of things" (Žižek, 2006, p. 17). Žižek (2006) writes that parallax, as it pertains to astronomy, is commonly defined as "the apparent displacement of an object (the shift of its position against a background), caused by a change in observational position that provides a new line of sight" (p. 17). Here, however, the concept of parallax is broadened to also mean that which defies easy bounding, and thus, through this ability to escape a firm grasp, that which disturbs and disorders. Beyond Moore's (2012) mapping of approaches to waste in geography, there have been no studies that adopt a parallax view of waste in relation to cases of community action in particular, and empirical cases in general. The following introduces a range of different approaches, perspectives, and understandings of waste, which

all problematise mainstream approaches that build waste as either a resource or hazard. I hold that positing waste as a complex object, which can be viewed from multiple angles, will serve to enrich our understanding of it.

2.2.2 Waste as constructive and constitutive

Every critical work on waste perhaps needs to begin with Mary Douglas' (1966) prominent work *Purity and Danger*, in which she suggests that dirt is not a heuristic and self-evident category of objects, but one that is constructed as *matter out of place*. Most waste scholars broaden their interpretation, or accept the interpretation, of dirt as also encompassing waste. To understand waste and dirt as matter out of place is to shift the character of waste to something that exists within the beholder. Douglas (1966) suggests that "dirt offends against order. Eliminating it is not a negative movement, but a positive effort to organise the environment [...]: it is a creative movement" (p. 2). Taking a step even further, Julia Kristeva (1982) suggests that waste and dirt are examples of abject, meaning an object with no other character than "that of being opposed to I" (p. 1). Waste becomes a boundary-creating object that is used to delineate the body and society from what it is not: dirt, useless, broken, unclean, violent, vile. The process of expelling waste – the process of abjection – is what defines and constitutes a society (Moore, 2012). This process is however "always incomplete [and] waste constantly threatens to destabilise sanitary spaces and subjects" (Moore, 2012, p. 792).

Building on the idea of waste as matter out of place and abject, waste has also been conceptualised from the point of view of body materiality (Hawkins, 2006), sociomateriality (e.g. Hultman & Corvellec, 2012), and sociospatiality (e.g. Hetherington, 2004; Moore, 2012). The piercing message is here that waste is constitutive of bodily, social, material and spatial conditions and contexts. Hawkins (2006) posits waste in relation to bodies and how we can build relations to waste that do not "recourse to guilt or moralism or despair" (p. ix), because waste gives rise not only to positive ordering movements, as Douglas (1966) suggests, but it also has the power to create intense and sometimes crippling emotions, such as disgust, irritation, anger, fury, despair, hopelessness, resentment, overwhelm, mourning, and so on (Hawkins, 2006). Waste is also a marker for the civilised and clean body and society:

"In cultures that pride themselves on being technologically 'advanced' catching a glimpse of the brute physicality of waste signals a kind of failure. After all, dual-flushing toilets and garbage contractors and In-Sink-Erators are meant to protect us from our waste; to hide the disgusting and the valueless with streamlined [efficiency]. This is how the elimination of waste became a marker of civilized modernity. And this is how the elimination of waste became implicated in the formation of a certain kind of person with distinct habits and beliefs as to what constitutes waste and how to get rid of it." (Hawkins, 2006, p. 1)

It is the performance of waste practices that constitute the body and the social (Hawkins, 2006; Hetherington, 2004). This performance serves the purpose of creating a belief and a fantasy that we, as individuals and as a society, create a civilised world around us, in which we have disposed of, managed, and vanquished waste, in which the waste is no longer an issue (Hawkins, 2006). The waste can, as such, be thought of as a non-human, which has agency and which shapes and orders human action (Hawkins, 2006; De Wolff, 2017). By paying attention to how waste can construct or be constitutive of people's sense of self, communities, or society as a whole, two things can be uncovered and highlighted: 1) how engaging with waste is not a negative practice, but rather a positive, ordering practice, thus removing some of the stigma that is attached to dealing with waste; and 2) how capitalist approaches to dealing with waste, rather than attempting to solve it. Waste is rarely posited as positive or even neutral, and while this is not the only perspective on waste in this research, allowing for the possibility that it could be, could provide a non-judgmental and non-moralising approach.

2.2.3 Waste as dynamic and transient

Another aspect of waste that is related to its ability to escape definition is its polyvalence, transient nature, and dynamism, which all manifest on different conceptual levels (Thompson, 1979; Levidow & Raman, 2019; Gille, 2010; Hultman & Corvellec, 2012; Davies, 2012). Where some disagreement is bound to arise in attempts at defining waste is whether something is waste or not. This depends in part on the perspective, i.e. whether waste is viewed as a resource or as something else, but this ambiguity is also created through the stages of waste and objects – going from (1) various, but separate materials, to (2) being turned into objects made up of these materials, to (3) being turned into objects that are no longer wanted or

useful. Waste furthermore goes through various processes of metamorphosis, even after something has become waste (Levidow & Raman, 2019), e.g. different types of treatment, where it is broken down, disassembled, or combined into something else, for example a coherent material, a fuel or something that is easier to burn. Waste is furthermore arguably mobile, in that it can spatially travel from locale to locale, both legally and illegally (Davies, 2012).

To ignore waste's transience and fix its ontological position as either resource/hazard or 'household waste' is an attempt to displace responsibility and smooth over the system's dysfunctionality. An example is the focus on the individual that is present in many efforts to instigate change around waste. Gille (2010) writes:

"The problem with splitting waste into the categories of producer waste and consumer waste [...] is that this reinforces the false assumption that consumers in Western capitalist societies make garbage, when in fact neither do they make trash materially nor do they have much choice in what materials they buy and thus turn into surplus stuff." (p. 1050, emphasis in original)

By refusing categorisation of waste into producer and consumer (and beyond), Gille (2010) demonstrates that it is possible to follow material and waste "metamorphosing into another as it traverses the circuits of production, distribution, consumption, reclamation, and 'annihilation'" (p. 1050). Waste is, as such, transient both in terms of materials making journeys across space and time, as well as its ability to embody multiple possibilities simultaneously. This is furthermore an example of where adopting a parallax view on waste becomes useful (Moore, 2012), as waste can be multiple things at the same time, depending on one's position as well as the temporal and spatial position of the waste itself. Through adopting an understanding of waste as a constantly dynamic object, the possibility of speaking of that object's temporal and spatial past and future opens up. Waste is thus not only waste, but simultaneously an object or a set of materials with use value that have come from somewhere and been assembled somewhere else. This uncovers, for example, how individuals do not make rubbish themselves, as Gille (2010) points out, but that the choice lies elsewhere – in the extraction, design, assembly, shipping, retail, or in the management choices, in none of which individuals have any say. Furthermore, by understanding that waste

is not a bounded and stable category, waste is also fruitfully opened up to include a variety of objects that *could* be waste or which represent moments when waste is prevented.

2.2.4 Waste as symbolic and representative

While waste has been constructed as a resource in capitalist-influenced, ecomodernist frameworks (e.g. England's RWS and EU's WFD), some critics of these frameworks, and capitalism in general, do not shun from the word *resource* per se (Moore, 2012; e.g. Gille, 2010; Gutberlet, 2008). Understanding waste as a resource can, in the context of informal recycling and scavenging, be useful for formalising work and protecting vulnerable populations, who still contribute to formal waste sectors (Gutberlet, 2008). The shift from waste to resource becomes a question of redemption, and the waste/objects that scavengers collect can be thought of as symbolic for themselves – waste as resource thus offers valuable opportunities for combatting marginalisation (Gutberlet, 2008). Furthermore, if waste is seen as a resource, this is thought to lead to other choices, rather than landfilling – i.e. the moral implication in the waste-as-resource narrative is that not utilising the wasted materials is to utterly squander (Gille, 2010), something that is morally condemnable in tales of resource efficiency. However, in circling back to a European context, Hultman and Corvellec (2012) question the imbuement of policy with the resource paradigm – if waste is a resource, and resources are positive, then "the more waste, the better" (p. 2417).

Waste is not only representative, but also symbolises moments of disruption. The rubbish we engage with constantly presents a very imminent threat of disrupting the smooth, shiny, civilised, convenient world we have built around us (Moore et al., 2018). Moore et al. (2018) suggest that waste, specifically battery waste in their example, represents moments in the lives of physical objects that have the potential to dislocate the convenience of modern, capitalist life, and thus cause anxiety, in the Lacanian sense (not the clinical). At the point when something becomes waste, its status shifts from constituent of this convenient life to a crack in the surface, where we have to engage with the impossibilities and incompatibilities of convenience, materiality and sustainability, and through which we can discern the dysfunctionality of capitalist systems (Moore et al., 2018). Moore (2012) also suggests that some waste literature coalesce around the perspective of waste as a fetishized commodity. Similar to the resource perspective, waste or pre-waste "has a use and exchange value, but it also obscures the social relationships behind its production and circulation" (Moore, 2012, p.

789). As mentioned above, waste has the power to unveil the dysfunctionality of modern society – here, fetishizing waste, e.g. turning it into a commodity or resource, represents the attempts to smooth over this dysfunctionality. To call waste a fetish is to (attempt to) reveal this unevenness (Moore, 2012).

By opening up waste to being symbolic and representative, the possibility to see what waste hides and uncovers is unlocked. Similar to waste as constitutive and dynamic, paying attention to waste as symbolic means that we have a way to engage with waste as not primarily *bad*, but as an opportunity to highlight how it connects to e.g. capitalism. Previous research on community action on waste has rarely engaged with the waste itself, let alone the possible political aspects of waste.

2.2.5 Summary – a parallax view of waste

There are clearly more approaches to, understandings of, and perspectives on, waste that can be adopted that go beyond *resource* and *hazard*. Furthermore, there are perspectives that still understand waste as a resource or hazard that are non-capitalist and that do not 'logically' lead to techno-market fixes, e.g. in the context of scavenging. Engaging with waste from the point of view of mainstream approaches will not 'solve' waste issues, only partially transform and contain them (Gregson & Crang, 2010). Adopting the perspective that waste is a complex object and a parallax object offers opportunities to be political, in the sense that it opens doors for engaging with not only waste, but also justice and sustainability (Moore, 2012). Going even further are the approaches to waste that criticize narrow resource and hazard narratives, as well as argue that waste and capitalism are intimately intertwined, that these narratives result in, and are the results of, capital-compatible techno-market fixes, and that any attempt to fruitfully solve waste issues must go beyond and thoroughly engage with the multiplicity and polyvalence of rubbish.

Interrogating waste as a complex object and with a parallax view means to not fix its ontological position, but be open to its multiple ontologies. Each perspective will fit a piece of the puzzle, with the hope to form a picture that speaks not only of the actual material, but also of what it does to e.g. people and communities. A more nuanced and productive account of what waste is and does can be created, by understanding it as simultaneously:

42

- constitutive and constructive, meaning that relationships, society, community, the individual, materiality, spatiality, the body etc. are created through, or in opposition to, waste;
- transient and polyvalent, in the sense that it can be both useful and useless depending on which point in time it is studied;
- and symbolic and representative, in that it can unveil unsustainability and injustice.

Moreover, while waste can be argued to unveil unsustainability, paradoxically, the engagement with it can offer opportunities to create sustainability, even if it is on a small scale. Whilst this section has explored alternative conceptualisations of waste, which are vital to moving beyond narrow capitalist framings of rubbish, there remains a need to explore post-capitalist forms of organisation. This is the subject of Section 2.3.

2.3 Towards post-capitalist organisation of and for waste

In this section, alternative and post-capitalist approaches to *organisation* will be in focus. Before I introduce particular approaches within this field and how they have been, or could be, applied to waste, a couple of definitions are in order. Below follows a few words on *organisation, post-capitalism* as well as *prefiguration*.

Organisation here is not understood as an entity, but as the intentional arrangement of systems of provision and social relations (Fournier, 2013; Parker, Cheney, Fournier & Land, 2014). Systems of provision do not only include 'positive' or productive types of provision, e.g. food, but also include the handling of unwanted or leftover materials and substances that arise in human society: that is, waste. Social relations refer to how humans view and treat one another, and what mediates the relations between us (De Angelis, 2003).

Post-marxist alternatives to capitalism have been studied and conceptualised through many lenses (Schmid, 2019), e.g. diverse, alternative or community economies (e.g. Gibson-Graham & Dombroski, 2020), grassroots innovation (Seyfang & Smith, 2007), communitybased approaches (CBA) (to waste – e.g. Luck & Sharp, 2003; to energy – e.g. Seyfang, Jin Park & Smith, 2013), commoning (e.g. De Angelis, 2017) and more. What they all have in common, I argue, is that they fit under a wider paradigm that emphasises non-capitalist relations, values and logics in organisation, i.e. they employ more sustainable and just criteria than capitalism, and the site of action sits outside of state and market. While non-capitalist could suffice to describe these approaches, I will take this one step further and label them post-capitalist (following e.g. Gibson-Graham, 2006; Chatterton, 2016). Like much work following Gibson-Graham (2006), the purpose of adopting a post-capitalist approach to *present, real-world examples* is to show that there is a diversity of practices and forms of organisation already happening that are *not* capitalist, while simultaneously opening up for the possibility that these could accompany us into a world after capitalism (Olin Wright, 2010). Furthermore, choosing the term *post-capitalism* infuses this paradigm with more hope and positivity than *non-capitalism*, as well as opens up for less intentionally *anti-capitalist* conceptualisations and real-world examples. *Post-capitalism* is, as such, a simultaneously descriptive and normative state and paradigm, in which practices and modes of organisation that cannot be described as capitalist exist, be that in the present or future. Beyond the productivity of such an approach, to focus on present alterity is also "to refuse the construction of the world in the image of the end of history" (De Angelis, 2007).

Post-capitalism's connections to the future – i.e. that it is as much a paradigm for the present as it is for what comes *after* capitalism – are, in this research, understood as *prefiguration*. Prefiguration is the act to create something in the present, that we would ideally want to see in the future (Yates, 2015; 2020). This idea often pertains to social organisation and social justice (e.g. flat hierarchies, direct democracy, equality, etc.), but is here used in a broader fashion to also incorporate other organising features as well as materiality. The underlying notion to prefiguration is that no change will ever come if it is not created it the present. *Post-capitalist possibility* thus signifies the potential of an entity or practice to create spaces and moments for prefiguring post-capitalism in the present.

One of the many legacies of Gibson-Graham's (1996; 2006) work is the concept of *capitalocentrism*, which contains the critique of focusing only on capitalism and casting it as the only and dominant system in town. Terms such as anti-capitalism can be argued to fall within this idea, as they can be viewed as antagonisms to capitalism. Instead, what is promoted is the adoption of a pluralist approach, which can recognise non-capitalist practices in the now, or in other terms, highlight economic difference (Gibson-Graham, 1996; 2006). While I recognise the importance of unveiling and normalising such practices and forms of organisation, I do not view it as conducive to *entirely* disregard the materially and historically deeply entrenched scars and structures of capitalism (Castree, 1999). As such, I position myself

with one foot each in the two paradigms of Marxist anti-capitalist tradition, and the post-Marxist approach of economic difference (Schmid, 2019).

In the rest of this section, I will introduce community and community-based approaches (CBA) first, before moving on to grassroots innovation, diverse economies, and lastly, commoning. Community and CBA are more descriptive, than political: these concepts revolve around the site of action, the unit of analysis, without necessarily referring to any kind of political, prefigurative action (even though this may very well be present both in reality and in analysis). Grassroots innovation lends itself to understanding what is novel or different (Seyfang & Smith, 2007). Community approaches and grassroots innovations emphasise that the site of action is not state, market nor individual, but rather the communal, and that solutions are created and organised by those they are for, rather than through a tech-heavy, centralised, profit-driven system. However, these approaches do not fundamentally engage with alterity to capitalism. Diverse economies is a related analytical lens through which diversity in the present can be uncovered: it casts aside alterity to capitalism and highlights existing, contemporary practices and forms of organisation that are diverse and can be based in community. While this takes a normative step beyond CBAW and GI, it intentionally disregards the legacies of capitalism. The final concept presented here is commoning (e.g. De Angelis, 2017): this is performed through community and can account for alterity to capitalism. What can be said about all of these approaches - with the exception of CBA - is that waste is rarely researched or conceptualised from the point of view of alternative or postcapitalist organisation, and when it is, it is even more rare that the materiality of waste is given credence. As such, there is a gap in in post-capitalist studies on the one hand, and waste studies on the other. The following section will thus highlight both where these have been joined, as well where they have not.

2.3.1 Community-based approaches (to waste)

What is common for many post-capitalist approaches, and specifically those included in this research, is that the site of action and production is situated outside of state and market. This site could theoretically be non-organised (i.e. anarchy), but the site of focus in this research is community. Provision and organisation based in community is nothing new – it is perhaps the oldest form of organising. Today, community-based approaches are sometimes viewed as obsolete or belonging to a bygone era, when our attention and awareness were focused on

the local, rather than the global. Community-based approaches can be understood as a twofold phenomenon: it consists of community on the one hand and organisation for something on the other. This section will introduce community first, then exemplify community-based organisation through the case of waste, including how community-based approaches to waste may be broadened from previous definitions, and lastly a reflection on the intentional move to call the accumulation of community waste initiatives a *movement*, and not a sector.

2.3.1.1 Community

Community is a contentious word and concept – one could be criticized for defining it; one could be criticized for not defining it. Boda (2018) distinguishes between existing (concrete and often geographic) and subsisting (ideal and often based on relations and characteristics) communities. Neither 'type' should be considered more real or superior (Boda, 2018). Retreating to even more fundamental aspects of the word, Hillery (1955) concludes that the only common denominator is that it pertains to people. As an additional layer, community is thought to evoke a sense of immediacy, closeness and locality (Williams, 1976). Boda (2018) further emphasises the importance of convergence between the understanding of community on behalf of the researcher and on behalf of those whose purported community is being studied. I have previously stated that community is often thought of as an apolitical realm. This does not mean that there is a lack of normativity within this space, nor that community cannot be politicised. Following work on community-based approaches to a variety of sustainability-related challenges and solutions (cf. Luckin & Sharp, 2005; Seyfang, Park & Smith, 2013; Slater, Frederickson & Yoxon, 2010), I furthermore use the word to contrast against mainstream approaches that rely on market-based mechanisms or state-based laws and regulations. Ultimately, in this research, I proceed from the assumption that community contains unexplored, post-capitalist possibility, as this is one of very few spaces where collective, non-capitalist values and activities can be realised and practiced.

However, I also follow a critical community approach (Aiken, Middlemiss, Sallu & Hauxwell-Baldwin, 2017), in the sense that I am not naïvely hailing community as an unproblematic and uncontested site of organisation and action. Communities and community-based initiatives often find themselves in unfriendly, capitalist contexts, can furthermore be far from harmonious, and might even reproduce inequality, exclusion, and division (Aiken et al., 2017). Taking a more critical approach to community studies is to walk

46

the line between seeing the potential that resides here, yet paying heed to the numerous complexities and contestations that arise within, as well as act on, communities. For example, capitalist contexts challenge the expression and spread of non-capitalist values and practices, even if they are undertaken within community. So while there might be post-capitalist possibility in the community realm, this possibility might not exist in all communities or all initiatives. Simultaneously, community can have numerous positive outcomes and impacts that are neither capitalist nor post-capitalist. All of these aspects are taken into account when the word 'community' is used in this thesis.

2.3.1.2 Community and waste

Community-based approaches to waste (CBAW) have been practiced and researched in various guises over the past few decades. Especially in the late 1990s to early 2000s, when "the community recycling sector had [...] its heyday" (CIWM, 2016, p. 8), community-based, third sector and voluntary organisations that dealt with waste received some scholarly attention, but significantly less, and with different foci, in recent years. While CBAW are not invisible in research on community and sustainability, it is less glamorous and could be seen to represent – to follow e.g. Douglas (1966) or Hawkins (2006) – a disgusting side of society that we would rather sweep under the rug than dig through. As such, it is still considered under-researched compared to energy or food for example.

There are a number of terms and definitions of community-based approaches to waste, including Third Sector Organisations in Waste Management (WM) (Alexander & Smaje, 2007; Williams, Curran & Schneider, 2012), Voluntary and Community Sector organisations in WM (Dururu et al., 2015), waste-related civil society activities, campaigns, and protests (Davies, 2006; 2007; 2008), community-based waste reduction initiatives (Robbins & Rowe, 2002), citizen-driven initiatives (for sustainability) (Zapata Campos & Zapata, 2017; Zapata Campos et al., 2020), informal waste collection initiatives (Gutberlet et al., 2016), and Community Waste Projects (CWPs) (Luckin & Sharp, 2003; 2004; 2005; Sharp & Luckin, 2006). They all broadly share the same definition, which is largely encapsulated by the definition from Luckin and Sharp (2005): "not-for-profit organisations that have the explicit objective of encouraging the minimisation, reuse or recycling of waste" (p. 62). Generally, CWPs that are focused on the management of waste are also understood as not only *encouraging* the minimisation, reuse of recycling of waste, but also as *facilitating* it, by delivering and supplying

services and opportunities. In this research, the term community-based *approaches* to waste is used as a concept to delineate types of activities and modes of organising around waste. Community Waste Project (CWP) is used to describe real-world initiatives, projects, and groups.

Community waste projects are varied in type of waste and material that is dealt with, goals and objectives, and organisational form. Examples include community recycling organisations (a type that was common in the 90s and 00s, but is rare nowadays (CIWM, 2016)), furniture reuse schemes and shops, paint saving projects, charity shops, scrapstores, community composting groups and so on. These projects differ from public and private entities in that they are focused on creating benefits for the environment as well as having positive social impacts, often for marginalised groups (Sharp & Luckin, 2006). They also operate according to other goals than profit or statutory duty (Luckin & Sharp, 2004), rely on other methods than industrial and techno-market-based, and the site of action is naturally the communal, not the centralised or the individual.

2.3.1.3 Expanding community-based approaches to waste

My understanding of CBAW extends beyond waste management and also includes organised litter-picking on the one hand and waste prevention through sharing on the other. Litter-picking as an organised activity, for example, has been around for many decades (KBT, n.d.). As the use of plastic in packaging and other activities, such as fishing, has increased over the past 70 years (Kirstein et al., 2019), so too has the need for more concerted efforts to rid urban environments and natural areas of rogue remnants of human activities. Community-based litter-picking is largely divided into urban areas (e.g. streets and parks) and natural areas (e.g. beaches and nature reserves). While marine plastics have received much attention, especially in later years, the collective picking of it has not (Jorgensen, Krasny & Baztan, 2021). The picking of other people's refuse could be theorised to be disgusting and off-putting – however, community-based litter-picking is reported to bring with it a sense of satisfaction and achievement, and a feeling of ownership and empowerment for those who partake (Storrier & McGlashan, 2005). Jorgensen et al. (2021) claim that, in the context of beach clean-ups, litter-picking groups have further-reaching impacts than simply cleaning – they also educate, advocate, research and monitor pollution and littering problematics, especially plastic. There

is a visceral touch to litter-picking that is perhaps not echoed in reuse and recycling projects. Jorgensen et al. (2021) write:

"Beach clean-ups focus on removing undesirable and even disgusting material. [...] They are performatively normative (Butler, 2010) in that they materially, even if momentarily, reflect participants' hopes for how their community—and the biosphere—should be. By removing marine litter from the beach, participants make performative and ethical statements about what belongs on the beach and what does not, who is responsible for and capable of making these decisions, and how they should be carried out once made." (p. 156)

On the other side of the waste hierarchy sits waste prevention. While this is conceived from an industrial and business point of view in EU legislation (Bartl, 2014), there are communitybased approaches to waste prevention as well. Libraries that lend not only books, but also things have been around for almost 100 years (Moore, 1995). In the past decade there has been a surge in so-called item-lending libraries (ILLs) being opened, including tool libraries, clothes libraries, seed libraries, and more generally, thing libraries (Baden, Peattie, & Oke, 2020). ILLs have historically not been oriented towards reducing environmental impacts or waste arisings, but have rather been driven by social objectives (Moore, 1995). The more recently set up ILLs, however, often have dual goals of reducing waste arisings and resource use on the one hand, and providing access to things for the masses or for the community on the other (Baden, et al., 2020).

There are naturally differences between CBAWs that focus on reuse and recycling, litter, and sharing, but I view them to share a few key ingredients: (1) they have both environmental and social objectives and/or outcomes; (2) the environmental objectives revolve around material stewardship and care, and the impact of materials on the environment; (3) they are non-profit, non-state actors; and (4) they often operate on small scales. The two latter firmly position these approaches and perspectives within the post-capitalist paradigm. While much research and conceptualisation around these have not focused on this position, but rather the more direct, real world-based role they play in the waste system, the majority of previous work on CBAW agrees that there is both existing value in what these groups do, as well as much potential to be created if LAs, the public and even

49

for-profit companies would recognise it. This should, however, not be interpreted as 'free labour' (Jorgensen, et al., 2021) or as a call to dump responsibility on the individual (Robbins & Rowe, 2002). While there are processual obstacles to increasing the valuing and recognition of the roles CBAW play, such as an overemphasis on e.g. quantifiable cost and benefits, there are also other, value- or culture-related obstacles to this. For example, as has been noted, the local is rarely viewed as a site for experimentation and innovation, but rather a destination for top-down approaches (Davies, 2007). As has been made clear, and will be further clarified, the local scale and the community site are rife with innovation and experimentation.

This section has introduced community-based approaches to waste, which in essence work to minimise waste and simultaneously provide social benefits. CBAW captures an exciting area of activity, care, and innovation, where the site of action remains outside market and state. This field, however, remains relatively depoliticised. Furthermore, much research and action in this realm has focused on the motivations and everyday struggles of these groups, initiatives, and projects, and while this is important, their novelty, their points of difference to the status quo, and their potential for playing a role in the transformation to a more sustainable and just society remain relatively unquestioned. These facts, coupled with its relatively out-of-date state, call for new research that can update, modernise, and politicise community action on waste. I will now turn to grassroots innovation in order to unravel these groups' position, capacity, and potential for creating small solutions, which could have further-reaching impacts.

2.3.1.4 Movement or sector?

It is worth briefly commenting on my choice of the term 'movement' to describe community waste initiatives in the UK. In previous literature on community waste, the accumulation of these initiatives has often been called a 'sector' (Luckin & Sharp, 2003: 2004; 2005; Sharp & Luckin 2006; Dururu et al, 2015; Alexander & Smaje, 2008). There may be relatively simple reasons for this, perhaps mainly that these initiatives are often viewed as residing in the third *sector* (and from there, it is not a far jump to call it a *community sector*). As I will outline below, however, I prefer the term 'movement', because it highlights the political aspects and possibilities of what community waste projects do. Waste is furthermore not the only materiality where community efforts are labelled a movement (Pohlmann & Colell, 2020)

have previously received attention as *movements*. However, extant literature on labelling accumulations of initiatives tends to focus on what the third sector is (e.g. Corry, 2010) or what social movements are (e.g. Della Porta & Diani, 2006), but not on whether or not something should be defined as a sector or movement. As the intentional move in this research is to shift our perspective on community waste initiatives from being a *sector* to *also* being a *movement*, the following briefly defines both and arrives at an argument for why the accumulation of initiatives under study in this research *could be*, as well as are, called a movement.

Third sector can be conceptualised in a variety of ways, both epistemologically and ontologically (Corry, 2010), but is often used to reify a productive or organisational sphere of society, positioned in relation to state or government (first sector), as well as private or market (second sector) (Etzioni, 1973). Characterising third sector groups, Salamon and Sokolowski (2016) outline the following:

- "unlike the state, [third sector groups] are private,
- unlike market entities, they primarily serve some common good,
- unlike families, participation in them involves some meaningful element of free choice" (Salamon & Sokolowski, 2016, p. 1518)

So far, the accumulation of community waste initiatives, and even a variety of commons, can easily be considered third sector. What I argue is lacking from this term, however, is the politicisation of the action and activities performed therein, as well as the recognition that many groups are not purely productive, but also practice resistance. 'Third sector' also leaves little space for highlighting the prefigurative possibilities for another way of organising (around) waste.

Movements, on the other hand, are not primarily about production, but about collective efforts to instigate change in society or to mobilise around a shared goal, and are, beyond this, highly fluid (Della Porta & Diani, 2006). Habermas (1981) distinguishes between 'old' movements or politics and 'new' movements, the latter of which can be theorised "as resistance to tendencies to colonise the life-world" (p. 35). While this research does not utilise Habermas' ideas of the life-world, the new movement idea translates beyond this – the tendencies described are often ones that are destructive to the social world as well as the

environment, something waste arguably is (Moore et al, 2018). Waste lends itself perhaps particularly well as the object of a movement, at least in Habermasian terms, as it can be viewed as a simultaneously tangible as well as symbolic destructor and threat to both society and the environment (Habermas, 1981). It is this destructor that is mobilised against in the diverse projects under study here, ranging from lending drills to picking crisp packets, all whilst outreach, lobbying, awareness raising, and norm challenging are practiced at the same time. While it is true that community waste projects undertake activities that may be interpreted as purely providing a service (e.g. Luckin & Sharp, 2005), as the term *sector* would denote, this research is also interested in what goes on beyond the service provision. By using the term *movement*, I thus aim to draw attention to the political aspects and possibilities arising from what CWPs do.

2.3.2 Grassroots innovation

The concept of grassroots innovation (GI) was developed to bridge innovation on one side and civil society action on the other (Seyfang & Smith, 2007). The term can be used to describe "networks of activists and organisations generating novel bottom-up solutions for sustainable development and sustainable consumption; solutions that respond to the local situation and the interests and values of the communities involved" (Seyfang & Smith, 2007, p. 585). GI was initially developed out of the concept of niches, which posits innovations as pockets or domains in the wider system, where new 'things' (social, technical or otherwise) can be seeded, nurtured and grown (Hoogma, Kemp, Schot and Truffer, 2002). What is being innovated is not necessarily a technology – it can also be relationships, modes of organisation, or ways of distribution and access. In the case of GIs, the domains in which innovation is performed or sought after is the community, civil society or grassroots (Seyfang & Smith, 2007). Examples of GIs are community energy projects (Seyfang & Haxeltine, 2012; Hargreaves, Hielscher, Seyfang & Smith, 2013), community-based sustainable housing (Seyfang, 2010), community gardens, community-supported agriculture, and other community-based food initiatives (White & Stirling, 2013; Kirwan, Ilbery, Maye & Carey, 2013) and community currencies (Seyfang & Longhurst, 2013).

These innovations differ from mainstream innovation in that they emerge from need, are rooted in local contexts, and are oriented towards creating solutions for sustainability (Kirwan et al., 2013). The bottom-up aspect is key in that it is contrasted against mainstream

policy and innovation development, which tend to be top-down and performed through already established entities, such as medium or large companies (Ross, Mitchell & May, 2012). The culture in GIs is unique and stands in stark contrast to more traditional innovation cultures – Ornetzeder and Rohracher (2013) describe it as "based on democracy, openness, diversity, practical experimentation, social learning and negotiation" (p. 865). Some, however, hold that external individuals or organisations could still be catalysts to "engage the grassroots in innovation [...] and put local knowledge and communities in the lead in the framing of a collaborative innovation activity" (Smith, Fressoli & Thomas, 2014).

Groups and initiatives that can be considered to be, create or practice grassroots innovation rarely do so in a vacuum. Indeed, networking, considering the local context and linking up to create a movement have been identified as important features of successful GIs (Feola & Nunes, 2014; Smith et al., 2014). Seyfang and Haxeltine (2012) point to the importance of networking *outside* the niche, i.e. to not only connect to and with other similar groups, but also with for example local government. GIs are further rarely homogenous, single-issue initiatives – they are collections of overlapping, complimentary, and sometimes competing goals, visions, sets of individuals and groups, and even movements (Seyfang & Longhurst, 2013).

2.3.2.1 Potential for sustainability

Grassroots innovations embody potential for sustainability in a range of ways, for example by creating a site in which experimentation can happen on the local level, without demands on profitability, by being a space where people and communities can practice and express values that are not accepted in mainstream settings, and by building local solutions for sustainability, and so on (Seyfang & Smith, 2007). How to determine if a GI can be considered successful in realising this potential varies across the literature. The success or impact of GIs should not be measured in the same way that capitalist innovations would be measured – by default, GIs are pragmatic and partial. However, any success will likely be compared to mainstream innovation on the one hand and more radical grassroots struggles on the other, likely ending up disappointing both, due to its compromised nature (Smith et al., 2014). Kirwan et al. (2013) state:

"[GIs] are driven by two key goals: firstly, to satisfy the needs of those people or communities who may in some way be disadvantaged by or excluded from the mainstream market economy, through helping to develop their capacities; and secondly, by an ideological commitment to develop alternatives to the mainstream hegemonic regime, which includes re-ordering the values and indicators of success for initiatives." (p. 831)

There are mainly three ways that GIs can develop, if they want to: replication, meaning new iterations and versions of the same project or initiative in other localities; scaling up, i.e. grow in size, number and reach; and translation, meaning how GIs can be adapted to the mainstream (Seyfang & Haxeltine, 2012). One option is of course to remain in place and work internally or simply continuing to provide and/or experiment (Hargreaves et al., 2013). GIs can, when civil society is mobilised through e.g. lobbying and protesting, unsettle regimes as well as create, instigate or be part of cultural changes (Hargreaves, Haxeltine, Longhurst & Seyfang, 2011).

Grassroots innovations naturally experience a variety of challenges, much to do with the previously mentioned foot in two camps – grassroots on one side and innovation on the other (Smith, Fressoli & Thomas, 2014). These are not mutually exclusive, but often present opposing values, demands and success measures. Seyfang and Smith (2007) divide challenges facing GIs largely into two categories: intrinsic challenges and diffusion challenges. Intrinsic concern that which is internal to the group or network, for example how they are organised and which resources and funding are available. These can impact their resilience in the face of changing circumstances. Diffusion challenges relate to external barriers – these are for example co-optation, lack of understanding and support in policy-making spaces, and ideological tensions (Hargreaves et al., 2013). Following the work on GIs, niche theories can be used to understand challenges and how to potentially overcome them (Seyfang and Smith 2007; Hargreaves et al., 2013) – an emphasis on continuous learning, networking and acquiring institutional support are seen as key factors (Raven, van den Bosch & Weterings, 2010).

2.3.2.2 Grassroots innovation for waste and post-capitalism

So far, waste or its prevention has rarely been of interest to GI scholars. To date, UK's Freegle (Martin, Upham & Budd, 2015), citizen-driven waste prevention initiatives in Gothenburg, Sweden (Zapata Campos & Zapata, 2017), and a zero-waste university programme in Mexico (Jiménez-Martínez & García-Barrios, 2020) are the only waste GIs that have been studied. This is in line with waste being relatively under-studied in general (cf. e.g. food or energy), and under-studied in community and grassroots studies in particular (again, cf. e.g. food or energy). This could be theorised to be the result of either waste being the disgusting and nonglamourous topic that it is (Hawkins, 2006), or that waste is often considered destructive and negative, rather than productive and positive (Thompson, 1979). Applying a GI perspective to community-based initiatives for waste could potentially draw out how alternative waste practices and systems exist in the margins, and can be drawn out into the mainstream (Jiménez-Martínez & García-Barrios, 2020), but also how they struggle under external pressures (Zapata Campos & Zapata, 2017; Martin et al., 2015). Where waste has been studied, its materiality is rarely paid attention to - Zapata Campos and Zapata (2017), however, focus on the journey that wastes (can) make in order to highlight how value can become visible (again) through processes of citizen-led reclamation.

Previous research on GI has often failed to engage with the political aspects of alternative organisation. This is not to say that this is completely absent, indeed, some of the fundaments that GI are built on include the realm beyond capitalism, the market, and consumerism (Seyfang & Smith, 2007), but GIs are rarely posited as post-capitalist possibility. Some of the conceptual origins of GIs are found in the sustainability transitions community (e.g. Geels, 2004), and build on approaches such as strategic niche management (Kemp, Schot & Hoogma, 1998), which have been criticised for being apolitical and viewing capitalism only as a landscape factor, when it is so permeating that socio-technical systems are in fact *"capitalist* socio-technical systems" (Feola, 2019, p. 2, emphasis in original; Chatterton, 2016). On the lack of normativity in transitions research, Chatterton (2016) asserts:

"If we are committed to greater social and environmental justice, as well as challenging further capital accumulation, what does this mean in terms of transitions? For those interested in post-capitalist transitions, it means that socio-technical transitions that lack an ability to confront the mechanisms that perpetuate capitalism at a daily level are not transitions worth making. They could create 'lock-in' to weak gains in terms of emission reductions and social justice outcomes as well as submission to techno-fixes and the extension of commodification into more areas of our lives." (p. 406)

The relevance of this quote for grassroots innovation is to highlight that certain transitions and innovations might appear sustainable or as leading to a more sustainable system on the surface, but are, in the face of capitalism, in fact insufficient, or even counterproductive if implemented in lieu of something else. Since grassroots innovation emphasises mainstreaming as a route to sustainability, special attention needs to be paid to what is being mainstreamed and how. The 'what' and 'how' should not be taken at face value simply because they are found in e.g. community or amongst the grassroots, but need further scrutiny so as not to contribute to further lock-in (Chatterton, 2016). Arguably, GIs are not synonymous with transitions, and they could still be viewed as partial responses to marketand tech-centric approaches to change and innovation.

This section has detailed grassroots innovation as one lens through which to study community-based initiatives, one which reclaims the word *innovation* to highlight that generating solutions and novelty is not isolated to the mainstream. GI especially lends itself to understanding the innovative processes of creating or recreating small-scale solutions for sustainability. However, the often depoliticised nature of much research on GI, as well as its tendency to highlight trajectories of mainstreaming, means that any fruitful engagement with capitalism must happen in combination with something that is capable of seeing community and grassroots action in the light of non- or post-capitalism. The next section thus turns to the concept of diverse economies.

2.3.3 Diverse economies

The concept diverse economies (DE), sometimes synonymously called community or alternative economies, was originally developed by J.K. Gibson-Graham (1996; 2006) with the goal of displacing capitalocentric narratives, both in mainstream economics as well as in more critical readings of the world, mainly purported by Marxist interpretations of political economy. While Marxist analysis casts capitalism as an all-encompassing and dominant system, the DE concept shifts focus away from capitalism, and even alterity to capitalism, towards contemporary and real-world diversity in economic and non-economic practice and

organisation as a starting point (Gibson-Graham & Dombroski, 2020). The DE project is informed by feminist and post-structuralist theories, and emphasises the world-making power in constructing and producing knowledge. Diverse economies is also infused with possibility, positivity and hope, as opposed to the sometimes negative and totalising structuralist analyses of capitalism (Gritzas & Kavoulakos, 2016; Gibson-Graham, Cameron & Healy, 2013). Like many post-capitalist lines of thinking, DE has a two-fold aim: a political one and a pragmatic one. Diverse economies scholars seek to meet this by displacing the hegemonic and monolithic position that capitalism has, not in reality, but in academic thought and policy worlds, and by highlighting, unveiling, and normalising real-world and contemporary practices and forms of organisation that are not capitalist (Gibson-Graham & Dombroski, 2020). The displacing practice has also been called *reframing* (Gibson-Graham, et al., 2013), i.e. imagining and intentionally understanding the economy and the productive spheres of human life in a different light, in a manner that takes "notice of *all* the things we do to ensure the material functioning and well-being of our households, communities, and nations" (Gibson-Graham et al., 2013, p. 4).

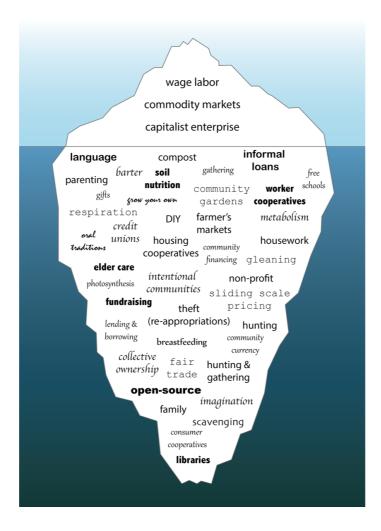


Figure 2.2. The diverse economies iceberg (Community Economies Collective, n.d.).

The practices and forms of organisation included in DE are everything that is not part of the formal, capitalist system. Figure 2.2 illustrates the diverse economies iceberg used by scholars and educators on diverse practices. This has been developed since its original publication in 2006 (Gibson-Graham, 2006), but serves to highlight that what is visible in formal, capitalist economies is just the tip of the iceberg, while what is submerged is an incredibly diverse set of entities, practices, forms of organisation and non-human others and processes that meet needs beyond or instead of capitalism (Gibson-Graham et al., 2013).

The focus on diversity and variety opens up space for seeing beyond capitalism, and furthermore creates ways to appreciate and evaluate, that do not use capitalist logics as premises (Gibson-Graham, 2010). One aim of this approach is to identify and map economic space outside of capitalist relations. Furthermore, this approach can cater and account for multiple contexts and cultures, not only a Western one (Gibson-Graham & Dombroski, 2020).

Table 2.1 below showcases the real-world application of diverse economies to spheres of economic and non-economic life, exemplified through waste management and prevention where possible.

Aspect	Capitalist	Alternative capitalist	Non-capitalist
Enterprise	Firm - private recycling	State/non-profit - state-	Cooperatives -
	company	operated incineration plant	community reuse centre
Labour	Wage - employed at	Alternative paid - work	Unpaid - volunteering for
	private waste export firm	training at charity shop	gifting platform
Property	Private – private firm	Alternative private - litter-	Open access - marine
	creating Waste Derived	picking on shared land, e.g.	litter (high seas)
	Fuel to be sold	a commons	
Transactions	Market – international	Alternative market – reuse	Non-market –
	recycling markets	charity	neighbourhood swap
			shop
Finance	Mainstream market –	Alternative market – grant	Non-market – donations
	income from recycled	funding for community	of time and resources to
	material sales	waste projects	community waste
			projects

Table 2.1. Spheres of economic and non-economic life, exemplified through waste. Adapted from Gibson-Graham (2010).

In this table, alternative capitalist and non-capitalist aspects of an economic system are presented, and exemplified using waste management or prevention. These aspects are: through which kind of entities we organise (enterprise); how we use our bodies to reach goals and meet needs (labour); our relation to external material and immaterial objects (property); how we access things we have not produced ourselves (transactions); and how we access stored value (finance) (Gibson-Graham, 2010). The table further highlights that diverse economies can exist on a spectrum, from capitalist to non-capitalist with variety in between. However, non-capitalist or diverse is not necessarily sustainable or just – slave labour and poaching can be considered non-capitalist, but are not desirable in a post-capitalist future. Whenever diverse economies, or post-capitalism in general, then is invoked, it needs to be accompanied by a specific and explicit understanding of what is desirable (Samers, 2005).

To date, waste or waste prevention has rarely been studied through diverse economies. Pansera and Rizzi (2020) highlight how social cooperatives focused on preparation for reuse in Italy performs alternative economic practices, by scaling up and growing, and simultaneously staying true to original principles regarding internal democracy and being worker-led. Electronics repair and reuse was studied in Mexico, utilising the lens of diverse economies to show that there is a multitude of economic and subsistence practices being performed in the recycling economy that are not purely capitalist, e.g. apprenticeship, exchange, and volunteering (Lepawsky, Araujo, Davis and Kahhat, 2017). Lastly, Sharp (2020) uses the sharing economy as an example of diverse economic practice, and divides this between transactional sharing (capitalist sharing, e.g. Uber) and transformational sharing (e.g. a community swap shop). While these studies show that waste can indeed be the object of diverse economic practice, it remains under-researched. Furthermore, the materiality of waste is ignored, partially echoing the previous sections on post-capitalist organisation of and for waste.

The diverse economies concept provides useful tools for this research: its emphasis on reframing, its contention that economic practice is a spectrum and not a dichotomy, and its focus on diversity in the present. While the DE concept and project speak of and to postcapitalism in general, and of positivity and hope in particular, the result of its analysis is, however, one step short of sufficient for this thesis: the argument goes that because of the capitalocentrism in Marxist thought and other conceptualisations of post-capitalism, e.g. alterity, we cannot see a way past capitalism (Gibson-Graham & Dombroski, 2020). The other side of focusing only on diversity in the present is then unfortunately the ignoring of the simultaneous presence of capitalism, historically, presently and in the future. Whilst I see the contributions of DE and subscribe to its aim, the partially material focus in this thesis does not allow a sole focus on diversity. Even if Gibson-Graham (1996; 2006) have already presented a counter-argument to critical claims of amateriality - that focusing on "possibility does not deny the forces that militate against it" (Gibson-Graham, 2006, p. xxxi) - this does not negate the lack of engagement with real effects of capitalism. This approach alone is thus insufficient for the purpose of this thesis. Something additional, or something that goes beyond this, is needed: commoning.

2.3.4 The commons and commoning

In this section, I will briefly introduce what a commons is and has historically been. Commoning, i.e. the social organisation of the commons, will then receive further attention – this will mainly be introduced through five commoning features, which I have distilled from a deep reading of commoning literature. These are also presented by highlighting their alterity to capitalism.

2.3.4.1 Historical and conceptual origins

A commons [sic²] is a piece of land or water, e.g. a forest or a lake, that, historically, was nonowned and that could be used by anyone, by those who cared for it, or by those who lived close to it (Bollier, 2014). The commons were important sources of food, fuel, and shelter for many people, especially the poor (Zückert, 2012; Linebaugh, 2008). From the 13th century onwards, however, many commons were enclosed, meaning they were appropriated by the state and donated to lords often in exchange for support for whoever was king at the time (Linebaugh, 2012). This process was often bloody and violent, and devastated the lives of many people (Zückert, 2012). In the Global North, commons are now only remnants and small pieces of land, which are often owned by the state, but are treated as commons, while it is estimated that around two billion people in the Global South rely to varying degrees on subsistence commons (Bollier, 2014).

The concept of the commons is often used in environmental economics, and most famously by Garrett Hardin (1968) in his work *Tragedy of the Commons*. Hardin reasoned that in a commons, each commoner will maximise their use, for example through putting as many cattle on shared land as possible, and that this is a result of rational individuals acting sensibly. He writes that this maximisation:

"...is the conclusion reached by each and every rational herdsman sharing a commons. Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit – in a world that is limited." (p. 1244)

² the singular as well as plural form of this word end with an s

As a solution to this tragedy, Hardin suggests both regulation and strengthening private property rights. This reasoning influenced scholars and policy-makers alike during the following decades (Ostrom, 1990; Bollier, 2012), even though it also received critique. In more recent publications on the topic, people have critiqued different aspects of Hardin's analysis, for example the assumptions that individuals will always maximise their own gain, that they will not speak to each other and that they have no knowledge of managing common land nor what overuse is (Mattei, 2012; Linebaugh, 2012; Payson, 2012). Zückert (2012) and Linebaugh (2012) also critique Hardin's ahistorical narrative of commons as unmanaged, without rules.

The next influential work to be published on the commons came from Ellinor Ostrom (1990). Her starting point was the quite limited success state and private ownership has had in solving the supposed tragedy of the commons (Ostrom, 1990). Ostrom's contribution is a theoretical framework based on numerous case studies of the successes and failures of what she terms common-pool resources (CPRs). CPRs are defined as "a natural or [human-made] resource system that is sufficiently large as to make it costly (but not impossible) to exclude potential beneficiaries from obtaining benefits from its use" (Ostrom, 1990, p. 30). In further critiquing mainstream economics and Hardin's tragedy theorem, Ostrom (2009) later identified three assumptions, which many economic theories, models, and policies are based on. The first assumption is that there are two organisational forms which society could and should strive for - state regulation and the market. The second is that there are two types of goods - private goods and public goods. The third refers to homo economicus: individuals are fully rational, and are capable of knowing and analysing every choice and strategy that one could possibly make in a situation, which outcomes are associated with which choice, and then decide which outcome will achieve the highest degree of utility for oneself (Ostrom, 2009). While Ostrom published a substantial blow to Hardin's tragedy parable, and was indeed the first (within academia) to suggest that commons are based around social organisation, the understanding of what a commons is has been argued to be too narrow - commons are viewed merely as resources that are distributed collectively and sustainably – when this is done, individuals can still own them under private property rights regimes (Fournier, 2013).

In recent decades, the commons has been shifted from merely a *thing* to a way of *practicing*. Commoning is now often understood as the doing, making, caring, creating, sharing around the commons, i.e. the practices involved (Bollier, 2014). Commoning can further be understood as alternative organisation (Fournier, 2013), i.e. alternative to the

dominant system(s) (Fournier, 2013; De Angelis & Harvie, 2014). It is this latter view that I hold as most conducive to understanding commoning as alterity to capitalism, as diversity in the present and as pieces of the future in the now.

Whilst much ground-breaking and important work has been undertaken on commoning, no systematic approach to studying this field of action has, to the best of my knowledge, been created. Ostrom (1990) put forth eight design principles for studying CPRs – however, for critical commons studies, these need to be nuanced and further politicised. As such, I have, through an extensive reading of commons and commoning literature, both present and historical, distilled five core features of commoning. They are true to the original commons, and they simultaneously appear as a politicised and more structured extension of community-based approaches, grassroots innovation, and diverse economies. The five features are need-meeting (De Angelis, 2003; Caffentzis and Federici, 2014), organising bottom-up (Esteva, 2014; Ginn & Ascensão, 2018), through cooperation, rather than competition (Fournier, 2013; Linebaugh, 2008), doing so outside the market (De Angelis and Harvie, 2014), and without relying on private property (Hardt and Negri, 2009). Figure 2.3 visualises the five features of commoning, with the following pages introducing each feature and its relevance for commoning further in depth.

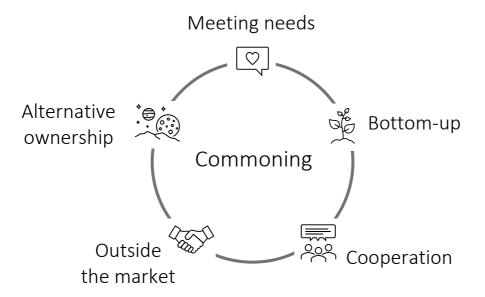


Figure 2.3. Five features of commoning.

2.3.4.2 Five commoning features

First feature: meeting needs

To meet needs might sound like a basic feature of any organisational system, be it commoning, a version of capitalism, or feudalism. However, as a feature of commoning, *meeting needs* takes on two specific characteristics – the needs are met outside market and state (De Angelis, 2003; Caffentzis & Federici, 2014), and the needs are *met*, not created (Euler, 2018; Helfrich & Bollier, 2014; Bennholdt-Thomsen, 2012). Needs being met *outside market and state* can further have two different reasons: (1) that the needs of a particular group are not met within the formal system (De Angelis, 2003); or (2) that these needs are met, but in a way that does not resonate with the ideals and values of the particular group, for example justice and sustainability (Bollier & Helfrich, 2015; Caffentzis & Federici, 2014). Needs being met, not created, is an important counterweight to capitalism that the commons can, and does, offer – "other than in capitalist structures, where the satisfaction of needs is predominantly only the means to a different end (profits), needs-satisfaction can be considered the ultimate aim of commoning" (Euler, 2018, p. 13).

What is needed remains largely open – the needs could be subsistence, such has food, water, housing, energy, care, health, waste services and so on (De Angelis, 2014), they could be cultural (Nieto-Romero, Valente, Figueiredo & Parra, 2019), or social (De Angelis, 2003). Recent research on commoning has suggested that the needs do not have to belong to humans, but also more-than-human actors (Nieto-Romero et al, 2019). The needs are furthermore always different, as they will not be free from context (Meretz, 2012). There is generally an emphasis on basic needs, which includes for example socialisation, learning and freedom. While very few attempt to draw a boundary between needs and wants, as needs are subjective, context-specific and localised, even fewer would argue that e.g. a smartphone or access to tropical fruit year around can be classified as *needs*, at least for most people. Indeed, the basic questions to ask in a commons paradigm are: "what do I/we need to live?" (Helfrich, 2012, p. 35) and "...what is necessary for a good life[?]" (Bennholdt-Thomsen, 2012, p. 84).

The relationship between needs and meeting them is furthermore not always straightforward. Especially waste, as it is complex, is a simultaneously destructive and productive object, for which some might have a need for a service of riddance, whereas it for others constitutes a route through which other needs can be met. Especially in the Global South, waste can become a commons through scavenging and informal picking (Gidwani, 2013). Here, the discards of the city, or the Global North, become transformed from useless to filled with value and opportunities, through which other, more basic needs can be met. Whether waste or waste services constitute something that we *need* is a defining, yet murky question. Depending on one's approach to waste the answer could be both yes and no. Similarly, we might need waste services now, but we also need to not need them in the future.

Second feature: bottom-up

The second feature of commoning is *bottom-up*. The word bottom-up at once signals location (bottom) and trajectory (up). The conceptual basis is not as clear for this feature as they are for e.g. *meeting needs* or *cooperation*. I have chosen this term to signify the grassroots, localised, contextualised and participatory aspects of commoning (Ginn & Ascensão, 2018; Fournier, 2013), while simultaneously highlighting that commoning is not viewed to happen in a vacuum. Rather, a recognition of the political aspects of organising alternatively are part and parcel of commoning (Esteva, 2014; De Angelis, 2003; Chatterton, Featherstone & Routledge, 2013).

Thorough theorising on what bottom-up means is lacking, with the term being rarely defined, likely under the assumption that readers will be in the know and have a tacit understanding. In this research, I interpret the bottom as community, locality, grassroots, 'the ground' and so on, i.e. where the needs referred to in the previous section are *felt* (Moreira & Fuster Morell, 2020). The bottom could also refer to the marginalised, whose needs are not met or are met inadequately. Up could, depending on one's view, mean two very different things – it could on the one hand mean that the initiative itself is moved upwards, through processes of e.g. scaling up, professionalising, formalisation, mainstreaming, and so on. On the other hand, it could refer to the direction in which efforts to instigate change are made. In this research, the difference between the former and the latter perspective will be used to delineate what separates commoning from other initiatives and types of organising. This understanding recognises that a significant part of managing or organising a commons or commoning initiative is to provide an alternative and a solution on the bottom – "under the very basic and logic assumption that democracy should be where the people are, not 'upstairs'" (Esteva, 2014, p. 150). Power needs to remain on the bottom for anything to be considered commoning, and remain there in perpetuity (Ginn & Ascensão, 2018; Chatterton et al., 2013; Helfrich & Bollier, 2014).

65

However, very few initiatives believe they exist in a vacuum, and are therefore often organising efforts to advance or progress certain activities or objectives upwards, either to facilitate their own aims, to increase their potential and impact, or because they are aware of injustices further afield – be they national or global. Indeed, if what De Angelis (2003) proposes – "[to build] a new world from the bottom up" (p. 1) – will be strived for, surely some kind of effort to extend beyond the immediate is needed. Chatterton, Featherstone and Routledge (2013) put this into perspective:

"Therefore, the task of commoning is not just to (re)create locally controlled commons, especially for the most marginalised (although this is a crucial task), but also to mount a connected geopolitical challenge to move the present balance of power away from ever more powerful coalitions of multinational institutions and to strengthen a globally connected grassroots movement for greater climate justice" (p. 612)

The feature bottom-up (as well as cooperation – see next section) also cuts through to governance, an important aspect of commoning. To organise bottom-up is to self-organise, to self-determine, to devise one's own rules (Meretz, 2012). From a commoning perspective, it makes little sense to have someone else make your rules, as if context does not matter. The governance of the commoning initiative is by necessity bottom-up, as it is only in the grassroots that the contextualised understanding is found, meaning decision-making, initiative and management happen and remain on the bottom.

Third feature: cooperation

The third feature in this framework is cooperation. It can be defined as "the act of working together for a particular purpose" (Cambridge dictionary, n.d.), however the details of *working together* are, as for bottom-up, often left unspoken. This is not to say that cooperation is used arbitrarily, but that it needs further scrutiny before it can be applied analytically.

Cooperation can be seen as absolutely fundamental to commons organising. Critique against Hardin's *Tragedy of the Commons* (1968) largely coalesces along two lines: (1) that the assumption that *homo economicus* is human nature is faulty (Mattei, 2012; Payson, 2012; Linebaugh; 2012); and (2) that the scenario of commoners not cooperating with each other is unrealistic (Zückert, 2012; Linebaugh, 2012). *Homo economicus* is the idea of the self-

maximising individual, who, in this context, will only look so far as their own gain and ignore all other factors. Hardin (1967) famously wrote: "Ruin is the destination toward which all men rush, *each pursuing his own best interest* in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all" (p. 1244, my emphasis). The claim that this is human nature is, however, misguided (Habermann, 2012). In an isolated context, such as an experiment, selfishness only becomes the permeating force once one individual starts acting selfishly. Until then, most people cooperate, i.e. it is not human *nature* to compete (Habermann, 2012). Going back to Hardin's pasture commons – the individuals using the pasture likely live in the same area, know each other, speak to each other, perhaps even have friend or family ties to one another. To claim otherwise is highly ahistorical (Zückert, 2012). These two critiques essentially state that a commons without cooperation is not a commons at all, or in other words: cooperation is absolutely fundamental.

Fournier (2013) conceptualises commons organising largely as different levels of cooperation: organising *in common, for the common* and *of the common*. To organise *in* common is to allocate resources from e.g. a common-pool, for example how many blueberries each and everyone can pick from off the common. To organise *for* the common means to use together, for example bake and eat a blueberry pie *together*. Lastly, to organise *of* the common is to produce together, for example grow blueberries, or care for the forest where they grow wild, *together*.

Working together in a commons is multifaceted. Important aspects of day-to-day cooperation include working towards a shared goal (Helfrich & Bollier, 2014; Acksel et al, 2016); open and fair communication (Helfrich and Bollier, 2014; Ostrom & Walker, 1989); applying a fair decision-making structure, for example democracy, consensus, or compromise (Meretz, 2012); organising in a hierarchically flat manner (Bradley & Pargman, 2017); and participating voluntarily (Euler, 2018; Williams & Windebank, 2003). Cooperation can, and does, spontaneously happen without some of the above aspects. Lane (2011), for example, studied bulky waste collections in Australia and how these offered opportunities for freeganism, scavenging, and getting to know one's neighbours in the process. Within this, neighbours practiced commoning with only *implicit* cooperation, i.e. without relying on communication and without any predetermined rules – only the tacit and rumoured guided the scavenging commons acts. However, cooperation most often needs to be based on

communication to allow for fair and sustainable outcomes (Helfrich and Bollier, 2014; Ostrom & Walker, 1989).

On the issue of who is included in commons organising, most works are inclined towards everyone who wants to be involved:

"It is in this sense that we might think of commoning as another name for solidarity, one that describes how it is practiced—the rules through which we enable cooperation in ways that are fundamentally inclusive, that elicit and are sustained by participation. Seeing these efforts as a practice of commoning highlights cooperation between participants across the dividing lines of class, race, gender and sexuality but also across generations, extending solidarity to those who come after." (Healy, Borowiak, Pavlovskaya & Safri, 2018, p. 9)

The point of cooperation is not only to ensure the longevity of the commons or commoning initiative in itself, but also to create or recreate the social. The purpose of organising for the common and of the common is social reproduction (Fournier, 2013): to build community. Cooperation under fair circumstances reproduces itself, and it is through cooperative action that purpose can be found (Meretz, 2012). This is also in line with a critical community approach, where attention needs to be paid to who is included in the community that is (re)produced (Aiken et al., 2017).

Cooperation is not only practiced internally, but also outwards – another counter-force of the commoning project vis-à-vis capitalism is the cooperation, not competition, with external entities (De Angelis, 2003; Meretz, 2012). Competition is the favoured form of interaction on the market, which seeps into how individuals act towards each other. To organise according to competition in order to win, is also to organise for someone else's loss or failure (Meretz, 2012). De Angelis (2003) captures this: "It is only through connecting to the outside of locality in non-competitive forms that major problems faced by any locality can be in principle solvable." (p. 12)

Fourth feature: outside the market

The fourth feature of commoning is *outside the market*, meaning that activities are organised, services are offered, things are created and distributed in the realm beyond the market. De Angelis (2003) formulates it like this:

"In a nutshell, commons suggest alternative, non-commodified means to fulfil social needs, e.g. to obtain social wealth and to organise social production. Commons are necessarily created and sustained by communities, i.e. by social networks of mutual aid, solidarity, and practices of human exchange that are not reduced to the market form." (p. 5, my emphasis)

To communicate the significance of this feature, brief attention will be given the process and implications of marketisation. Marketisation here acts as an umbrella term for a set of sub-processes, logics and tools that lead an entity to organise their activities and attempts to reach their objectives through the market, or according to market logics.

Firstly, for something to be put on the market, it has to go through a process of commodification, meaning having its use-value stripped, and replaced with an exchange-value (Polanyi, 1944). To turn anything – things (goods), acts (services), people (labour), ideas (patents), knowledge (information), nature (resources), personal information (data) and so on - into something that can be exchanged on a market, it needs to be scaled down to a price, meaning other non-market values, such as personal, cultural, social, historical, etcetera, are ignored (Vivero-Pol, 2017). A consequence of commodification is that it hides the unsustainability and injustice associated with the extraction of materials, production of things, and provision of services. Another result of commodification is its naturalisation of waste (Esteva, 2014). Injustice further becomes obscured through naturalisation of labour for monetary compensation, under the assumption that the time that each individual has spent to acquire said monetary compensation is unimportant (Hardt & Negri, 2009; Bennholdt-Thomsen, 2012). Once on the market, there are certain rules and logics, which guide interactions and transactions (Parker et al, 2014). Rules include having to use monetary means to obtain a commodity (Bennholdt-Thomsen, 2012) and respecting private property (private property will be covered in the next and final section). Guiding logics, mainly for producers and provisioners, include cost efficiency, profit motive, competition (which has been covered in the previous section), and so on (Parker et al, 2014).

In the sense that commoning is the antithesis of capitalism, to organise outside the market thus means to not partake in commodification, not use money, avert from privatisation, and so on. As such, it can also involve practices such as gifting, non-monetary exchange, such as trade (e.g. I trade these tomatoes I grew for you walking my dog) and

lending/borrowing (Gibson-Graham et al., 2013; Holmes, 2018). However, while ideal forms of commoning are performed outside the market, it is, even for the most radical, nigh on impossible to completely meet one's needs without some connection to the market, at least in the Global North. Much commoning on waste happens in the informal realm, mainly in the Global South (Zapata & Zapata Campos, 2015; Gidwani, 2013), but also in the Global North (Lane, 2011).

Fifth feature: alternative ownership

The fifth and final feature of commoning is that of alternative ownership. Within this term, space is made for a variety of aspects related to property, enclosure, and our relation to things, material, space, ideas, knowledge, culture, nature, people, and so on (this is not an exhaustive list, nor are all of these relevant to this research). Ownership has a special place in both the history of the commons as well as capitalism (Gibson-Graham, Cameron & Healy, 2016), perhaps for the same, yet opposite, reasons. Humanity's relation to external objects is one where we imagine that we have acquired certain rights to objects through various processes – finders-keepers, colonisation, trading, inheritance and so on. While ownership might seem unquestionable, *property* is ultimately a construct.

Under capitalism, private property is held as a central tool for a functioning market: indeed, exchange on the market is arguably axiomatically connected to private property. Enclosure can narrowly be defined as a process of eviction from common land, where previously non-owned land is turned into private property (Jeffrey, McFarlane & Vasudevan, 2012). Marx (1867) argued that capitalism was possible because of *primitive accumulation*, which is essentially the first form of enclosure – a process, often violent and bloody, by which those who came to be capitalists dispossessed those who became labourers. One of the rationales for this was that non-owned land was considered 'waste', i.e. a waste of productivity and foregone economic opportunity (Frazer, 1999). However, a by-product of marketisation and privatisation is that the material elements that could theoretically be reproduced in perpetuity are ripped out of its context and ecosystem, thus inevitably resulting in the creation of actual waste (Esteva, 2014).

Why ownership has a special place in the history of the commons, and why it would be next to sacrilege to ignore this, is the very nature of what was originally a commons. To reiterate, the commons were non-claimed, non-owned pieces of land or water, upon and from

70

which local residents could collect various resources they needed. The non-owned, or collectively owned, aspect of the commons was what defined them: its 'other' – private property – existed for one beneficiary, while the commons existed for the many (Cooke, Landau-Ward & Rickards, 2019; Bradley & Pargman, 2017; Hardt & Negri, 2009).

Today, there are few instances of where something is non-owned, except for the high seas, the air, and space. Most other areas of land, bodies of water, and indeed every artefact that has ever been created by a human (except perhaps for marine litter), are under some kind of ownership – individual, corporate, public. Even projects that intentionally organise themselves according to commons or commoning principles need to engage with ownership, as that is the context within which they operate. Hardt and Negri (2009) comment:

"Private property has made us stupid, as Marx says, so stupid that we are blind to the common! It seems that economists and politicians can only see the world as divided between private and public, either owned by capitalists or controlled by the state, as if the common did not exist" (p. 280).

While this is likely the case, some take a more pragmatic position and argue that it does not matter what the legal form of ownership is, anything can be 'commoned', i.e. shifted to a commoning organisation paradigm (Gibson-Graham et al., 2016).

2.3.4.3 Commoning in practice

I will summarise and close section 2.3 by giving brief attention to how these five features can be put into practice. While this will be in focus in Chapter 6, a brief overview and exemplification utilising waste will allow commoning to materialise into existence. Table 2.2 summarises each feature and exemplifies this through a community-based approach to waste.

Feature	Summary	Relation to waste	
Meeting needs	The initiative meets needs that are unmet or insufficiently met by state and/or market. Needs are context-specific.	<i>Community wood recycling project</i> – needs are: access to cheap wood; saving new timber from being felled; meaningful employment and volunteering opportunities for disadvantaged adults; information and activities around reuse and recycling (CWR, n.d.)	
Bottom-up	The initiative retains decision-making and organising on or close to the bottom. E.g. political objectives can be advanced.	<i>Litter-picking group</i> – bottom-up is organised: remains untied to larger org.; makes decisions about activities close to where needs are perceived; advances objectives of litter-free natural areas to the council; raises awareness (No Place for Litter, n.d.)	
Cooperation	The initiative relies heavily on cooperation – activities are performed jointly; shared goals, fair decision- making, communication, etc.	<i>Litter-picking group</i> – cooperation is practiced: goals of cleaner streets are shared; picking litter is done together; decisions are taken by a group of people who live in the area and also pick litter (No Place for Litter, n.d.)	
Outside the market	The initiative undertakes its activities outside the market, without using money, without sales, or by being non-profit.	<i>Peer-to-peer gifting platform</i> – organised outside the market: the activity is gifting reused items through an online, local group without using money; website is run centrally and funded through donations; central organisation is minimal and partly volunteer-based (Freegle, n.d.)	
Alternative ownership	The initiative does not rely on private property, but uses and promotes alternative ways of engaging with e.g. space, stuff and knowledge	Clothes library – practices alternative ownership: collecting and distributing used children's clothes; promotes sharing locally (The Small Project, n.d.)	

Table 2.2. Summary of commoning and examples of commoning for waste.

As Table 2.2 shows, the five features of commoning do not only exist in a stylised and lofty theoretical realm, but also in practice. The true challenge, however, lies in practising all five simultaneously. What emerges from research into CBAW or GI is that groups and initiatives that seek to employ alternative values and rationales rather than the dominant, profit-seeking logic of capitalism, struggle (Dururu et al., 2015; Martin, Upham & Budd, 2015). There is no reason to expect that initiatives practising commoning – a further extension of CBAW – experience anything different. Commoning, when interpreted as it has been here, does,

however, stand out in relation to community-based approaches to waste, grassroots innovation, and even diverse economies. These are valuable in themselves and provide useful lenses, but to truly engage with past, present and future forms of non-capitalism, commoning appears as a more structured attempt at post-capitalist organisation.

What research on commoning has to date failed to do is attempt to understand noncapitalist organisation of and for *waste* as commoning. As highlighted in this section, only very few works have previously done so, notably Lane (2011), Gidwani (2013), and Zapata and Zapata Campos, Zapata and Ordeñez (2020). It is unsurprising that waste remains underresearched, even in more critical study fields – beyond having emotive attributes, waste is often understood as destruction and symbolises negative value (Thompson, 1979). Commoning, on the other hand, rather focuses on *production* and *positive* value. In this research, however, I intend to engage with both, to understand whether or not waste is *always* destructive, and if commoning truly cannot handle something like waste.

2.3.5 Summary – post-capitalist approaches to organisation of and for waste

This section has briefly introduced four post-capitalist approaches to organisation: community-based initiatives, grassroots innovation, diverse economies, and commoning. These can, to varying extents, be considered alternative to capitalist organisation. Focusing on different aspects of organisation, and leaving others behind, they serve to highlight a variety of ways that post-capitalist organisation can be understood. Community-based approaches focus on the immediate and positive effects, that community initiatives have on social and environmental sustainability in general, and on waste and community in particular. This type of action, as well as the accompanying research, however, rarely pay attention to political aspects of organising, e.g. capitalism or post-capitalism. Grassroots innovation was then introduced as a particularly useful tool when searching for novelty in terms of technology, organising, relationships, and practices. GI further focuses on how such innovations can be diffused and mainstreamed. The emphasis here lies in alternative innovation for sustainability, but, again, not in the political aspects of what is being innovated. Diverse economies, on the other hand, attempts to highlight how non-capitalist practices and forms of organising already exist today. The strength of the DE concept is its ability to politicise organisation and community. However, where it is insufficient for this thesis is its intentional disregard for the materially and historically entrenched effects and structures of capitalism. This is an important shortcoming that is highly relevant for this research, as it pays attention to materiality in general, and waste in particular. Lastly, commoning, through its five features, can highlight community, alterity, diversity, as well as embody post-capitalism. As such, it follows from the three previous approaches to post-capitalist organisation, but can deliver and provide where these fall short.

Except for community-based approaches, none of these bodies of literature or areas of scholarship have, hitherto, focused on waste extensively. This section highlighted where and when this has been done before, and where no research on waste has been undertaken; concepts and tools were further introduced and exemplified through attention to waste management and waste prevention, without pre-empting what Chapters 4-6 will present.

The next section will bring alternative organisation and alternative conceptualisations of waste together to form an analytical framework, which can be utilised to understand postcapitalist organisation of and for waste. As mentioned, commoning will be further introduced, structured according to the features highlighted in the previous section: meeting needs, bottom-up, cooperation, outside the market, and alternative ownership. Section 2.4 rounds up this chapter by introducing the questions that guide this research.

2.4 Introducing a framework for post-capitalist waste studies

The path to this final section has been the two strands of alternative conceptualisations of waste (section 2.2) and post-capitalist approaches to organisation of and for waste (section 2.3). Either of these would create an adequate analysis of each of the sides of what is under study in this thesis. However, the aim of this research is not to remain rooted in one dimension, but to connect the two, i.e. to ask not only 'what can commoning do for waste?', but also, for the first time, ask 'what can waste do for commoning?'. To reiterate, the necessity for this comes out of the nature of capitalism, which permeates both organisation of waste on the one hand, and the imaginaries and accompanying material realities of waste on the other.

2.4.1 A framework for post-capitalist organisation of and for waste

From the literature review performed in sections 2.1-2.3 a number of important points and questions emerge, ones that need to be engaged with in order to understand both waste and organisation, as noted above. Waste was shown to be locked into the perspectives resource and hazard, which will generate a specific set of management choices and solutions. In order to understand how other solutions might come about, waste needs to be interrogated differently: what is constructed in relation to waste and how; at what point in a material's journey we view it and whether or not we can understand it as multiple things at the same time; and what it represents, hides and symbolises. However, a single-dimension query into how waste is managed will likely fall short of providing a useful narrative, as materiality alone cannot fully understand nor mount a challenge to capitalism: the organisational side must also be given attention. From this point of view, waste is the by-product of the capitalist society both in spite of and because of how it is managed – meaning, the attempts at managing it are tied up with what generated the waste to begin with, i.e. profit imperatives; and its management options are insufficient and only serve to transform and contain, rather than actually dispose of and solve waste. Questions needing to be asked here revolve around whether needs are met or created; if profit and market logics are guiding waste operations; and whether or not those that are affected by management choices are involved in decisions. In this thesis, the site of both of these – alternative approaches to waste and organisation – are searched for in the realm of community action. The reason for this is that they inhabit a space, which is the 'free-est' of capitalist logics – as such, the community realm is viewed as the ideal site for post-capitalist action.

Figure 2.4 illustrates this dual interrogation. As the assumption is that alterity in terms of organisation and materiality/imaginary is the most likely to exist in the community realm, this is what appears in the centre. Community-based approaches to waste are here viewed from the angle of alternative understandings and engagement with materiality on the one hand, and alternative organisation on the other. While the two top boxes could remain open depending on what is under study (i.e. food, energy, water, housing, care, etc. on the one hand, and grassroots innovation, diverse economies, commoning, etc. on the other), I have populated this illustration with what is specifically under study here. The outcome of this dual interrogation will be a nuanced understanding of how community-based approaches (to waste) create post-capitalist possibility (for waste) in the now and in the future.

75

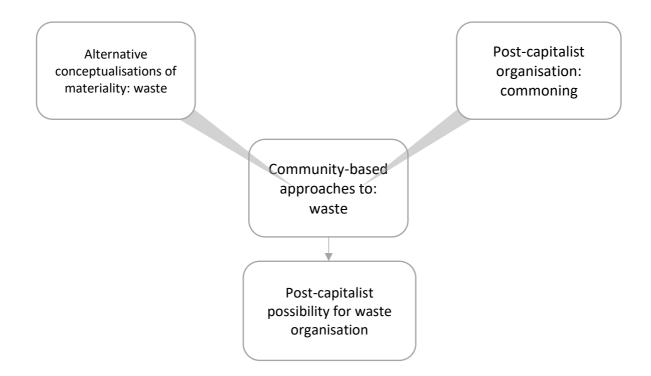


Figure 2.4. A framework for materiality and organisation.

While Figure 2.4 captures this framework in broad brushstrokes, the interrogation on each side needs to be further detailed and populated. As previously outlined, I adopt a parallax view of waste, meaning that I am interested in multiple parallel, competing, complementing, or compromising perspectives of it. Waste is further a complex object, which is polyvalent and transient. It could be viewed as matter out place, with the resulting actions being to put the matter into place again; it could create negative and/or violent emotions; it could represent that which is broken, useless and impure; it can be viewed both as an opportunity to engage with (un)sustainability and (in)justice, and it could simultaneously hide these. These aspects and perspectives are absolutely crucial to engage with: as the assumption is that waste is more complex than mainstream understandings of it, then this complexity needs to be laid bare and unfolded. Only through the engagement with complexity will we be able to move past it: only by accepting that waste acts on society, and that society constructs waste, will we be able to create more sustainable relations to it. Thus, to understand how waste is viewed, which role it plays, and which effects this has, I have developed a set of analytical questions based on the alternative conceptualisations outlined in Section 2.2. Their purpose is manifold: to break waste down into more nuanced categories; to understand the role of waste in a community or society; and to uncover which perspectives on waste exist amongst those who are studied. These questions are presented in Table 2.3 below.

Category	Question
Composition – <i>basic</i>	 What kind of waste/material is handled?
questions to distinguish	 How is the waste/material handled?
between different types of	 Who is viewed as responsible for the waste/material?
wastes and activities	
Position – questions aimed	Where in the waste hierarchy does the waste/material
to uncover if waste is a	fit?
fluid or fixed category	• Which position(s) of the waste/material are emphasised?
Representation –	 What role(s) does the waste/material have in the
questions for	initiative/project/group?
understanding the	 Does the waste/material spark emotion? If yes, which
symbolism and role waste	emotion? How is this emotion resolved?
has in the group	 Is waste viewed as symbolic or representative for
	something?

Table 2.3. Questions for approaching materiality of waste.

Having presented how waste will be examined, I now turn to the second lens through which to interrogate community-based approaches: commoning. This also needs further deepening in order to be productive in the attempt to uncover possibility for alterity, diversity, and potential future modes of organisation. As has been noted previously, it is unfair to any community group or grassroots initiative to demand ideological or organisational purity. Thus, these questions do not serve to uncover whether or not an initiative *is* a commoning. As for alternative conceptualisations of waste, interrogating and engaging with that which is alternative to capitalism is crucial if the aim is to search for sustainable and just options and alternatives. The assumption that this research rests on is that post-capitalist possibility exists in the community realm, but that this possibility will only become visible by applying an

intentionally post-capitalist analytical framework, such as commoning. Commoning has already been structured in Section 2.3 – here I have followed this division of commoning into five features: meeting needs, bottom-up, cooperation, outside the market and alternative ownership. In Table 2.4 below, each feature is given one or more questions to aid its examination.

Feature	Questions
Meeting needs	 Which needs are (attempted to be) met?
	• How are these needs met?
	 Which needs are not met and why?
Bottom-up	What comes from/remains on the bottom?
	 What is advanced upwards and how?
Cooperation	What kind of cooperation is practiced?
	How is cooperation performed?
Outside the market	 Are there any signs of marketisation?
	 If yes, are there any modulating factors?
	• Are free practices performed or promoted?
Alternative ownership	• What is the ownership form in practice for stuff, services, space
	and knowledge?

Table 2.4. Questions for approaching commoning as organisation.

The marriage of waste and commoning is not a simple one, as commoning often leans towards the positive and productive, and waste sometimes leans towards the destructive and negative. However, adopting the position that waste is a complex object, and that commoning is about organisation, rather than production, this marriage will not only be possible, but also the first of its kind. Waste and commoning have been joined before, though not extensively and not in the way that I propose to combine them.

2.4.2 Summary and research questions

This chapter has shown that mainstream approaches to waste are largely organised through state and market, adopt either techno-market or individualist fixes as solutions, and yet are not very close to solving any waste issues. Indeed, waste and capitalism are complexly intertwined, and waste arises both in spite and because of mainstream, capitalist waste management. What this chapter has also asserted is that any search for sustainability and justice in the realm of waste must engage with two sides: materiality on the one hand, and organisation on the other. The former will be engaged with through the adoption of a parallax view, meaning that differing perspectives on waste are seen as complimentary, rather than competing (although these are, in themselves, not mutually exclusive); the latter asserts that if current organisation, both for the prevention and management of waste. Drawing on what has been detailed in this chapter, this final section will introduce the research question and provide an overview of how and where they will be answered.

The aim of this thesis was outlined at the end of Chapter 1 as uncovering possibilities and strategies for post-capitalist organisation of and for waste. This thesis rests on the assumption that such possibilities and strategies can be gleaned only in the community realm, as this is the 'free-est' of capitalist influence, compared to market and state. However, acknowledging that capitalist waste is a question of both materiality and organisation, it is only by applying more radical and attentive conceptualisations of waste on the one hand and organisation of the other, that post-capitalist possibilities and strategies can be uncovered. The research questions presented below serve to, in order, map the realm of community waste action, interrogate it for materiality of waste and mode of organisation, and for each of these, discuss the implications for post-capitalist organisation of and for waste. In turn, these questions thus address gaps, outdated research, as well as potential for new and exciting research pathways on how we might view post-capitalist organisation of and for waste.

RQ1: What are the characteristics and possibilities of the UK Community Waste Movement?

The first research question is addressed mainly in Chapter 4, with additional details and depth being added in Chapter 5. Specifically, RQ1 seeks to map and explore the aggregation of

community waste projects in the UK, here termed the Community Waste Movement (CWM). This chapter updates and adds further insights to previous research in the field of community waste in the UK, and Europe more generally (e.g. Luckin & Sharp, 2004; 2005; Sharp & Luckin, 2006; Davies, 2007; 2008; Curran & Williams, 2010; Dururu et al., 2015). As such, this chapter addresses the need identified in Section 2.3.1 of rekindling and updating research into community waste action. It also brings this research into the 2020s, where waste has come to pertain not only to reuse and recycling, but also the negative impacts of rogue materials as well as prevention further upstream. The data gathered through the survey is used for this exploration. Seeking to lay the foundation for subsequent chapters, this research question asks for a description of the state of community waste action in the UK, followed by a discussion of what possibilities might emerge in this realm of action. It also departs from the understanding asserted in Chapter 2, and further establishes, that litter-picking as well as item-lending libraries as types of initiatives that fit under the community waste action umbrella.

RQ2: What is the role of, and perspectives on, waste in Community Waste Projects, and what are the implications for post-capitalism?

The second research question is addressed in Chapter 5 – this specifically interrogates the materiality of waste in community waste projects in general, and the three cases under study in particular. Drawing on works from Moore (2012), Hawkins (2006), Douglas (1966), and more, and departing from a parallax view of waste (Žižek, 2006; Moore, 2012), this question seeks to uncover how waste acts on, and is acted on, in CWPs. This chapter established that to uncover post-capitalist possibility, both materiality of waste and organisation of and for waste need to be examined, something which has, to date, not been done. RQ2 and Chapter 5 address the first strand of this dual interrogation by utilising the qualitative data gathered through interviews and observation in each case. The second half of this question also queries for the implications for post-capitalism (in terms of waste), which is addressed through a discussion and an initial development of a set of principles for post-capitalist waste organisation, specifically discerned through attention to materiality.

RQ3: How is commoning practiced in Community Waste Projects, and what are the implications for post-capitalism?

The third and final research question is addressed in Chapter 6. This question turns to the other side of the dual interrogation of waste organisation – i.e. how *commoning* is practiced in community waste projects. This question rests on the understanding of commoning outlined in Section 2.3.4, where I have combined multiple conceptualisations of commons organising to create a holistic framework, which answered my need for a systematic approach to understanding and studying commoning. Specifically, commoning is understood as meeting needs (De Angelis, 2003), doing so bottom-up (Fournier, 2013; Chatterton et al., 2013), through cooperation (Fournier, 2013; Bollier & Helfrich, 2014), outside the market (De Angelis, 2003), and without relying on private property (Hardt & Negri, 2009). RQ3 thus asks how these features are present in community waste projects, and utilises the qualitative data from the three cases under study. By applying a radical lens of organisation to community action, this serves to politicise this action, something which was identified as lacking previously in this chapter. This examination is followed by a discussion on the implications for post-capitalism, similar to RQ2 and Chapter 5, but where the principles arise from attention to organisation in general, and commoning in particular.

Having introduced the theoretical foundation upon which this thesis rests, and the research questions that guide the inquiry here, the next chapter will turn to the methodological approaches and methods that were adopted in order to address the questions outlined above.

Chapter 3: A methodology for exploring the realm beyond capitalism

This chapter will introduce the philosophical underpinnings, methodologies, and methods that were applied in this research. The previous chapter identified several gaps in how communitybased approaches to waste are understood, viewed, and researched, most notably how materiality is rarely paid attention to, and how these approaches can be understood as postcapitalist possibility. Furthermore, much research on CBAW is out of date, with little work having been undertaken in the past decade. To address the research questions identified at the end of the previous chapter, a systematic and structured approach to capturing, analysing and making sense of community waste and post-capitalist organisation needs to be adopted. Specifically, this approach is a multi-method study, underpinned by a relational ontology and epistemology, which situates individual and community experience, meaning-making, and aspirations as key elements in approaching and understanding post-capitalist possibility.

Firstly, brief attention will be given to the theoretical foundation of this thesis – critical theory – and what subscribing to this means for scientific research. Once this foundation has been laid, I will move on to covering case study research that is partially informed by ethnography, as well as introduce the cases studied here. I will then outline the specific methods and techniques I have used in this project, before turning my gaze to analysis, writing up and ethical considerations.

3.1 Critical theory as a foundation in the search for post-capitalism

It is possible to undertake scientific research without paying heed to the rationale that underscores one's research interest, focus, and decisions. However, investigations that aim to be critical of the status quo should reflect on, and be transparent about, any assumptions about said status quo, as well as how to change it. I consider myself, and this research, constructivist, specifically within the school of critical theory, which aligns with much research on commoning (Roelvink, 2020; Nieto-Romero et al., 2019). There are many versions of critical theory, such as post-structuralism, but I will allow myself to remain open to the general

message of this school of thought, which can be said to mainly argue that our realities are "manifestations of the discourses and power relations of the social and historical contexts that produced them" (Kincheloe and McLaren, 2011, p. 287). Being a constructivist, I distance myself from positivism as well as critical realism (Alvesson and Sköldberg, 2000). Two crucial effects of taking a critical theory standpoint arise. The first is the emphasis on the power of research, i.e. the visible-making potential that all research embodies. The second is the importance that is attributed to experience. These two will receive brief attention below, before I turn to methodology.

3.1.1 Reflecting on the power of research

Critical theory, and especially post-structuralism, argues that all research holds and manifests power (Roelvink, 2020). To take a critical theory stance is to acknowledge that one's research participates in the project of normalisation – this normalisation "frames what is possible and what is impossible" (Roelvink, 2020, p. 457). As this research is focused on uncovering possibility, it is imperative that I am aware of which kind of normalisation project I support. In this research, I strive to participate in the normalisation of more sustainable and just ways of dealing with waste, as well as the normalisation of post-capitalist thought and possibility.

Furthermore, critical theory also comes with the imperative to make an effort to change what one finds, should it be oppressive (Roelvink, 2020). One assumption that sometimes underlines certain disciplines is that the knower has no effect on what is known or the knowledge that is produced (Alvesson and Sköldberg, 2000). This view of the scientist as neutral, objective, free of values and preconceptions has informed much of the view on science for the better part of its existence. While it can be debated whether or not it is possible to practice value-free science, adopting a critical theory position makes it not only difficult to claim a neutral knowing position, but it also completely goes against the entire critical theory project (Sarmiento, 2020). Critical theorists argue that it is a duty to uncover oppression and injustice (understood broadly), and work to change that with the power that we wield as interpreters and mediators of knowledge. This research is, as such, interested not only in making a contribution to the knowledge and understanding of the potential for creating post-capitalist possibility that community waste initiatives embody, but also in utilising research to normalise alterity and challenge an unsustainable and unjust status quo.

83

An important criticism to pre-empt here is that *all* research is performed with bias: however, owning up to my personal beliefs and biases means that my interpretations and results are more transparent and honest (Harding, 2004). In the vein of Gibson-Graham (1996), I am a post-capitalist. This means that I believe in a post-capitalist world, whose birth I aspire to support. This does not mean that I will allow my analysis to be skewed by what I believe, but it has influenced my research in the way that it helped define my research problem. The aim and questions that guide this research are in turn guided by questions such as 'Is a world beyond capitalism possible?', 'If so, how would it look?' and 'How do we get there?'. It is no different to be guided by a wish to support post-capitalism than a wish to support the ushering in of sustainable waste systems.

3.1.2 The value of experience and meaning

Critical theory is based on relational ontology, which means that research needs to be based on the assumption that we cannot access, let alone say or know anything, about a reality that exists 'out there', and only that we can access *interpretations* of that reality. While the focus, then, is on the subjective and intersubjective, this is not to say that critical theory does not take into account material and historical structures, only that we are here more concerned about critiquing instances of power, rather than providing a full account of the world on its own (Crespo, Arcieri and Hassan, 2016).

Critical theory, especially in the context of emancipatory and normative research projects (Sayer and Storper, 1997; Olin Wright, 2010), is concerned with the relational nature of reality (Nieto-Romero et al., 2019). Relationality is understood here as accounting for co-constituents of human experience, such as others, non-humans, and structures (Nieto-Romero et al., 2019). The importance of this is that it situates experience within and in relation to larger structures, and it means that they can, to a certain extent, be viewed as mutually constitutive. Especially inquiries into local battles with for example waste or the effects of capitalism must view experience on the one hand, and structure on the other, as intertwined. From a critical *realist* point of view, inquiring about experience is futile – for example, Archer argued that "we do not uncover real structures by interviewing people in-depth about them" (1998, p. 199). To a critical *theorist*, this is a dismissal of the human experience of injustice. Should we think that capitalism can be 'found' as some kind of entity that has physical presence in the world, then perhaps experience and meaning play a lesser role. However,

capitalism does not exist in this way – it is a set of ideas, which *become* within the worlds and knowledge that we construct and make use of. Interviewing people is thus highly relevant to uncover these structures as well as their implications for human life. Furthermore, relationality in knowing does not refute the *relevance* of the claims advanced, it only adds human experience, thus arguably strengthening the claim. Both capitalism and community are examples – the way we speak of them is generally an abstraction, but underneath that is a myriad of experiences of for example the effects of capitalism or a sense of community that link up, temporally and spatially, act on, are created by, and give substance to what we are talking about. As such, it is the experience of e.g. capitalism, and the meaning we make of those experiences, that allow us to understand capitalism's effects on human worlds.

Exploring post-capitalist possibility within the realm of waste and organisation, these philosophies have laid the foundation for my research. They have assured me that it is entirely possible, incredibly meaningful, and immensely powerful to anchor possible and current systems within the experiences of those who participate in both. While there are likely many ways of practicing post-capitalist organisation of and for waste, and equally many ways to research this, I have chosen to focus on intentional and collective efforts to create and support social justice as well as environmental sustainability. The rest of this chapter thus lays out how I performed research into these intentional and collective efforts – community-based waste groups – as well as the methodological foundations behind every choice.

3.2 Performing a multi-method study

Leaving philosophy behind, I now turn to the more concrete aspects of my research. This research was undertaken as a multi-method study, which means I employed several methods to answer my research questions. The coming section outlines this process chronologically by first introducing how I 'found' the field, delineated it, and mapped it, followed by how I performed three in-depth case studies. This section ends on briefly outlining how an ethnographic methodology informed my case study research.

3.2.1 Identifying the field

The starting point of my research was to find ways of organising waste outside of state and market. Following research on e.g. community energy (Seyfang, Park & Smith, 2013), I theorised that I could 'find' something similar, but for waste. The assumption was that for

example charity shops, repair cafés, and composting groups could fall under the umbrella term community waste. After an extensive online search and much deliberation, I created a typology map of alternative waste approaches (see Figure 3.1 on the next page), as well as a database of specific community waste projects. Simultaneous to this exploration, decisions about what to focus on were made. This became an evolving process of inclusion and exclusion, and these decisions were not made in succinct and delineated moments in time, but rather throughout the progression of the project. The four most defining decisions on delimitations around the time of exploration were those of including litter-picking, as this indeed is an example of community action on waste; excluding food waste, as there are other values attached to food than to stuff; drawing a hard boundary between non-profit and for-profit, as the focus here is on community and commoning; and focusing on groups, not practices and lifestyles, again, as this research is interested in community and collective action.



Figure 3.1. Community-based approaches to managing or preventing waste – as is evident, no large-scale, industrial techno-fixes figure on this map. The bubble titled Waste management, and its sub-headings, refer to aspects of conventional recycling and types of recycling that are possible to undertake on a community level, e.g. collection of materials that are then fed into an industrial system, and composting. All approaches are non-profit, community-based, and collectively performed and/or organised. The colours are only meant for visual accessibility.

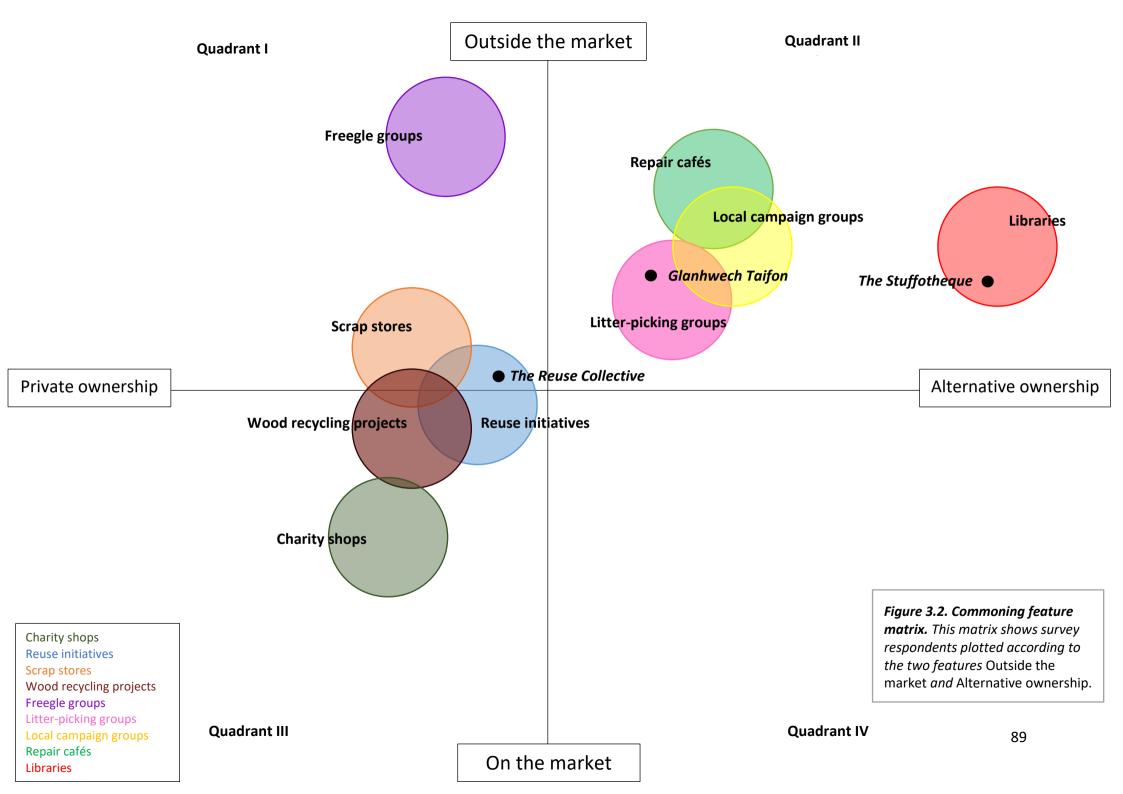
3.2.2 Surveying community-based waste projects

At this point, I initiated the first data collection moment of my research – the national mapping survey. This had the dual goal of exploring which waste-related, community-based activities were undertaken in the UK, and simultaneously creating a pool from which to sample cases in subsequent steps of the research process. The survey was performed online, and was disseminated to the database of projects I created in the typology stage, through social media, and through inclusion in branch and sector organisations' newsletters and forums. The survey contained single- and multiple-choice as well as text-based questions, inquiring about aspects of organising a community or third sector initiative, e.g. around aims, successes, challenges, etc. The survey gathered 75 responses from projects such as repair cafés, item-lending libraries, gifting platforms, charity shops, and litter-picking groups. As mentioned, the survey will receive further introduction in Section 3.3.1.

After the survey closed, I was set to initiate the next step in my data collection: case study research. Between these two moments, however, I organised my upgrade workshop³. My research group and two external researchers, whose interests were relevant to my area of study, were invited. The purpose was to present my findings thus far and my proposed plan forward. This proved a pivotal moment, echoing previous PhD students. In the discussions following my presentation, we focused on what commoning means, what it means in relation to waste, as well as in relation to community. Through these discussions, it became clear that of the five commoning features, *outside the market* and *alternative ownership* were those that stood out the most. The other three can be theorised to largely be practiced in virtually every community initiative. For the coming case studies, I thus decided to focus my sampling strategy on these two features, as I assumed that this would tease out points of difference both to capitalism, as well as between cases.

Following what had been discussed, I plotted the survey responses on a matrix. This plotting resulted in patterns regarding type of waste and activity, which I compiled into CWP types. Figure 3.2 overleaf presents the matrix along with (for a further explanation of this process, see Section 3.4.2.1).

³ Upgrade workshops are no longer required by UEA, but are still practiced within the 3S research group, as they are a pivotal moment and incredibly useful for PhD students.



3.2.3 Case study research

Finalising this matrix marked the start of my next data collection moment: case study. Case study was early on deemed the most appropriate methodology for the purpose of this part of the project. Case study research is used "in order to gain detailed understanding of [a] case, and [...] from this understanding [...] shed light on the wider phenomenon of which that case is an example" (Cohen, 2003, p. 3). Case study offers a "nuanced view of reality" (Flyvbjerg, 2006, p. 223) as context-dependent. Reality will never exist free of context, which is why case study research is appropriate for focusing on phenomena, and how phenomena are shaped and negotiated through context. Case study research should not be compared to quantitative lines of inquiry, as the data collection and generation, as well as the knowledge gained, are not only structured differently – the aim, i.e. to understand phenomena, context, meaning, experience, and structure in-depth, is also completely different (Flyvbjerg, 2006).

One key aspect within debates around case study research is that of what constitutes a case. Stake (2003) holds that cases can be complex or simple, and that "it is one among others" (p. 135). Building on that a case study is an example of a phenomenon (Cohen, 2003) – the phenomenon can be communities that organise around waste, a case thereof can therefore be one particular community group. Lund (2014), however, highlights that cases are always constructs – cases are not natural entities, but the idea of the case is a tool which helps us organise knowledge. To the question "of what is this a case?" (Lund, 2014, p. 224) the answer in this thesis is *community-based approaches to waste.* The aim of this research is to understand how and why, if at all, they are *post-capitalist* approaches to waste as well, and specifically if they practice commoning. As such, they will not be introduced as post-capitalist or commons, but as community-based.

3.2.3.1 Sampling

At this stage, I thus needed to decide which survey respondents I would approach with the request to undertake a case study. The survey had provided me with a pool to sample from, the matrix created a system that could guide the sampling, but a strategy was still needed. Flyvbjerg (2006) divides selection and sampling strategies according to purpose (see Table 3.1 overleaf). The sampling itself was information-oriented, as I was mainly interested in obtaining as much information as I could (Flyvbjerg, 2006). The cases that I finally approached

were a litter-picking group (LPG), a combined reuse and recycling initiative (reuse hub for short), and an item-lending library (ILL). Specifically, these three cases were maximum variation cases as well as paradigmatic cases. I was interested in their variation along two lines: 1) they are each a different type of community-based waste initiative, and 2) they are each placed within different quadrants of the matrix, meaning they were likely to engage differently with the commoning features (see Figure 3.2 on p. 87 for their positions). They can also be viewed as paradigmatic cases, as I, in this research, am attempting to establish a field of study, namely post-capitalist waste studies. Essentially, these cases were chosen because they, based on the sampling strategy as well as my knowledge of their survey responses, seemed to offer the most diverse and insightful opportunities to study commoning on waste.

Type of selection	Purpose
1. Random selection	To avoid systematic biases in the sample. The sample's size is decisive for generalization.
2. Information-oriented selection	To maximize the utility of information from small samples and single cases. Cases are selected on the basis of expectations about their information content.
a) Extreme/deviant case	To obtain information on unusual cases, which can be especially problematic or especially good in a more closely defined sense.
b) Maximum variation cases	To obtain information about the significance of various circumstances for case process and outcome (e.g., three to four cases that are very different on one dimension: size, form of organization, location, budget).
c) Critical cases	To achieve information that permits logical deductions of the type, "If this is (not) valid for this case, then it applies to all (no) cases."
d) Paradigmatic cases	To develop a metaphor or establish a school for the domain that the case concerns.

Table 3.1. Types of selection and sampling strategies and their purpose. Adapted from *Flyvbjerg* (2006).

However, when conducting case research, one does not simply choose the cases, the cases must also choose you. Approaching each group, I was aware that I was likely competing for their attention and time. Furthermore, there was also a risk that they had a negative view of researchers who 'mine' data without giving anything back. The two older groups had indeed had experience of being approached by researchers, both academic and students, sometimes in the data mining fashion. To increase my chances and to use my privileged position as a paid researcher, I offered my skills and time in return for their time and knowledge. To this proposition, each case group happily accepted.

3.2.4 Introducing three community-based waste projects

The three cases that make up the majority of the empirical data provide unique, yet indicative, insights into how communities organise waste and waste prevention. The three cases are a litter-picking group (Glanhewch Taifon or GT), a reuse hub (The Reuse Collective or TRC) and an item-lending library (The Stuffotheque or SOT). It should be noted that these names are pseudonyms – using pseudonyms was established to protect the identity of individuals as well as groups, in case the interviews or analysis contained or created anything sensitive, as well as to retain the possibility for me to undertake critical analysis (this is further explained in Section 3.5.3). As mentioned in the previous section, these cases were chosen both because of their similarities as well as their differences. Their similarities, while they perhaps are evident at this point, are based in:

- Their being situated outside state and for-profit market. It should be noted that TRC, while being non-profit and a charity, does operate on the market. SOT also operates on the service market (selling access to things), but was a non-profit company at the start of this research.
- Their aims being grounded both in efforts to reduce negative environmental impacts from waste and material extraction and production, as well as building or supporting a community.
- Their alterity either in terms of how they are organised, what they provide or what their aims are.

While being similar, these cases are also different to each other in a number of aspects. Table 3.2 below briefly summarises both these differences and serves to introduce some of the basic characteristics for each case.

	Glanhewch Taifon	The Reuse Collective	The Stuffotheque
Existed since	2018	1995	2014
Location*	Casdwr, Wales. A residential area on the edge of the commercial centre of a larger city in Wales.	Thornbridge, England. A small town in a rural area in the South of England.	Glasney, Avenham, England. A combined residential and commercial area in a larger and densely populated city in England.
Type of project	Litter-picking group	Community reuse and recycling hub	Item-lending library
Type of waste/material	Illegally discarded and fly-tipped materials and commercial and household wastes	Garden waste/compost, clothes, kitchen appliances, tools, furniture, books, metal scrap, certain household wastes	Preventing electrical and other wastes (other – e.g. tents, backpacks, gardening tools)
Activities	Picking litter jointly, greening, collaborating with other groups	Sales of reused items/materials and compost, workshops	Self-service borrowing, hosting library plug- in, workshops
Place in waste hierarchy	Outside – deals with failure of waste management	Recycling and reuse	Prevention
Aims (from survey)	Reducing amount of litter and fly-tipping; increasing green spaces; creating feeling of pride in the community and for more neighbours to get to know each other; supporting individuals and smaller groups who are also working towards the same aims; collaborating in a creative way to achieve aims	Reducing waste; educating people on the importance of reducing, reusing and repairing; providing resources to the local community; providing employment; providing recycling facilities	Making borrowing better than buying; building community resilience; reducing waste to landfill
Organisational form	Constituted community group	Charitable incorporated organisation	At the time of survey: non-profit company ltd by guarantee; changed during fieldwork to for-profit ltd by guarantee
Position on matrix and rationale (see Figure 3.2)	Lower-left corner of quadrant II: GT is not monetised, but does not actively promote 'non-market'; care for a shared space, but do not actively promote alternative ownership	Upper-right corner of quadrant III: TRC operates on the market, but is non-profit; sell things intended for private ownership, but provide service viewed as belonging to everyone	Lower-right corner of quadrant II: SOT was non-profit and membership-based, but was partially monetised; they provide access to and actively promote alternative ownership

Table 3.2. An introduction to the three cases, and how they differ from each other. * = these place names are fictional, to protect the anonymity of the case groups and the respondents. The description of each place is not fictional.

These cases are both similar and diverging from each other, meaning that they will provide different perspectives as well as corroborate and nuance in comparison to each other. On their own, they will provide insights into the specificities of community action and commoning on waste, litter and things, and together they will start creating a picture of what kind of post-capitalist possibility exists within contemporary, community-based waste action.

Case studies can be undertaken and performed in a number of ways. Case study research and ethnography are generally two separate methodologies, although they are sometimes used interchangeably (Cohen, 2003). I view them as separate, but as having the potential to be performed together. Cohen (2003) argues that, at their core, ethnography is inward-looking and wants to understand and describe a social world, whereas case study is outward-looking and wants to understand phenomena, by looking at examples of those phenomena. Case study does not indicate which method to use, but in social sciences, the methods are often qualitative, and centred on interviewing, observation, focus groups, as well as (sometimes extensive) document analysis (Stake, 2003). In the case study stage of this research, I employed qualitative methods, partially informed by an ethnographic approach, but with a simultaneously extrospective aim, i.e. a combination of methods that allow for both inward- and outward-looking. In the next section, I introduce ethnography, before continuing on to methods.

3.2.5 Ethnography

Coffrey (2018) describes ethnography as "a term used within the social sciences and humanities to describe and define a social research method, or more accurately a set of methods for understanding and making sense of cultural and social worlds" (Coffrey, 2018, p. 2). Further developing this broad definition, ethnography is about *understanding* others, their experiences, meanings, and life worlds (Eisenhart, 2019). Performing ethnography offers the opportunity for immersion in context, and understanding views and actions as contextualised, rather than as isolated. While critical theory often prefers more participatory methods, researching the social world through experience, meaning ,and context is highly pertinent to the relational aspects of this theory.

Coffrey (2018) identifies six principles of doing ethnography. These are presented in Table 3.3 along with commentary on how this has been translated to, and practiced in, my fieldwork. It should be noted that some of these are *not* translated or practiced in my

research, owing to the fact that I have not undertaken a pure ethnography. The reason for this, as laid out in the previous section, is that I am not interested in purely the intra- and inter-personal worlds of each participant and case, but also how these connect to larger projects around e.g. sustainability, justice, and post-capitalism.

Principle	Translation to this research
1. Context. Making sense of a social world can only be done with attention to context. Context is understood as e.g. spatial, temporal, historical, organisational and so on. However, we will never be able to <i>fully</i> understand the social world and its inhabitants.	Interviews were organised to uncover both inner worlds and experiences as well as the outer world, relations to others, things and situations. Interviews were conducted in situ. Observation was practiced.
2. Attention to process. The processual relationship between events, context, humans and more-than-humans are of interest. The ethnographer must also always pay reflexive attention to their influence over how the research develops and takes place.	I was aware that these groups had undergone, were undergoing and would undergo further changes, thus attention was paid to change and process. I was aware of my own position and how I influenced the data collection – I was always ready to change direction if the process needed me to.
3. 'Field'-based. Ethnography most often takes place in the social world that is researched. The researcher needs to attempt to immerse themselves. This also means, and this is an important point of ethnographic research, that the primary research instrument is <i>the researcher</i> <i>herself.</i>	These case studies were field-based, but it must be noted that the time spent in the field with each group was limited. This was due to a number of reasons, some of them personal. Even so, as Coffrey (2018) notes, immersion in the field is a question of quality, not quantity.
4. Recognition of the interactional nature of social life. The interactional – relational – character of sociality needs attention. Social life is complex, situated, contextualised and fluid – that people might have differing views does not make either of them 'untrue', following a relational epistemology.	Subscribing to a relational epistemology means that interpretations of accounts need to remain open to multiple truths simultaneously: in interviews, I was careful to not cast judgment on the correctness of participants' statements – furthermore, in my analysis, I am open to that more than one view can hold true.
5. Paying attention to talking and doing. Ethnographers must also attempt to make sense both of what social actors do, as well as what they say.	While not strictly adhering to this, I have focused on what groups say they do and aim for, as well as how this translated to reality. The reason for this has not been to point to inconsistency, but rather understanding the challenges of putting ideology into practice.

6. Telling the story. Ethnographers are	This principle is partly honoured in this thesis, and
committed to telling the story of the worlds	partly beyond. Here, I aim to represent
they have visited – the researched must be	participants and groups fairly, while still allowing
fairly represented and committed to fairness	for critical analysis of post-capitalist possibility.
and reflexivity.	This is not meant to discredit participants and
	groups, but rather put experiences, views, and
	actions into relation with capitalist structures and
	perspectives, which can co-opt and obstruct.

Table 3.3. Ethnographic principles and how they were translated in my research.

Principle 3 emphasises being field-based as a trait of ethnographic research. Table 3.4 below further provides an overview of the time I spent with each group and in each location.

	Time spent in location	Interviews	Activities	Other
Glanhewch	Three long	8	Three litter-picking	Spent time walking
Taifon	weekends –		events, one coffee	through and
	nine days in		meeting with	observing in Taifon,
	total		multiple LP groups,	neighbouring areas
			one evening with	and Casdwr city
			the core group	
The Reuse	Two weeks on	12	One annual general	Spent time at site,
Collective	separate		meeting	in town, in cafes,
	occasions – 12			informal coffee,
	days in total			dinner and
				meetings with
				organisers
The	Weekends and	15	Anniversary	Spent time at site
Stuffotheque	weekdays on		celebration event,	and in the area,
	five separate		training with core	many informal chats
	occasions – 11		group	with borrowers,
	days in total			volunteers and
				library staff

Table 3.4. Time spent in location and with each group.

These visits, events, activities, interviews, and moments of observation allowed me to obtain a thorough understanding of each case as well as the location within which each initiative was situated. Evidently, ethnographic principles inform my research, but are in no way the only methodology employed. Interviews and observation were infused by ethnographic ideals, but were organised as part of case studies. The next section turns to the ins and outs of the methods employed, starting with the survey.

3.3 Methods

This chapter has thus far introduced the philosophies of science that ground this research – critical theory, relational viewpoints as well as the grander aim of contributing to the normalisation project of more just and sustainable ways of organising waste – as well as the methodological foundation on which this thesis rests – i.e. case study research and ethnography. Now that these have been covered, it is time to turn to the practical intricacies of performed research – data collection and analysis. This section begins with the survey, before moving on to interviews and observation.

3.3.1 Survey

The first piece of data collection performed was an online survey targeted at communitybased waste projects, groups, and organisations withing the UK. As indicated previously, the survey had a two-fold purpose: one was to create a pool of community-based waste groups from which I could sample cases; the second was to explore and understand what exists and what is practiced within this movement in the UK.

The survey, included in Appendix 1, consisted of 35 questions, of which five were 'administrative', i.e. asking for an email address etc. The survey was divided into five sections, to collect a broad range of data relevant to what these groups aim for, do, and experience:

- 1. Organisation, history and geography
- 2. Aims and activities
- 3. Successes and challenges
- 4. Members and engagement
- 5. Further details

The questions were a mix between single- or multiple-choice questions and open-ended text questions. The text questions increased the survey time as well as my dataset, but I considered these important to ask, as the picture I wanted to paint was not one of numbers, but one of narratives. Any statistical analysis was never intended, and as such, text-based questions provided the richness that was needed to fully capture the many impressive and important aspects of organising informally or without profit. The survey was also piloted by two local groups, which provided useful insights into how questions were asked, how the survey was structured as well as the number of questions. Following the input from these groups, I restructured the survey accordingly.

During my desktop-based research, I had gathered names and contact details of as many groups as I could. In the survey stage, these were contacted with the request to fill in my questionnaire. I also offered a prize draw of £100 to one group that filled in the entire survey. Beyond this list, I continued my search for community-based waste groups; I contacted multiple networks that gather e.g. scrap stores; I spread the survey through Facebook and Twitter, where many groups are active; and lastly, it was included in a wasterelated newsletter for Local Authorities. The aim was to capture as comprehensive a picture as possible, without asking respondents for hours of their time. In hindsight, the survey was still too long. The data gathered, however, was greatly useful in understanding which kind of groups existed, how they liked to organise, how they were funded, what was most important to them, what they had achieved, what they struggled with, and how many members they had. After having had the survey open for three months, I received 75 full and valid responses (three were omitted: one LA, one for-profit company, and one that had accidentally done the survey twice). This is not statistically representative of the Community Waste Movement as a whole, but this was never the intention: the aim was to explore, make visible, and create an indicative story of what exists.

The actual number of community-based waste groups is difficult to determine, with previous works on community waste, however operating under narrower definitions, estimating that in 2006 850 such groups in existed the UK (Sharp & Luckin, 2006). This movement is fluid and changes quickly, rendering it challenging to capture. However, based on a web search of the largest networks that gather various CWPs, such as the Community Wood Recycling Network, Reuseful, The Reuse Network, as well as various specific types (that perhaps are especially active online), I estimate that there are roughly 3,500 community-

98

based waste groups in the UK, as is shown in Table 3.5 below. When charity shops are included, this number rises to around 14,700.

Category	Question	Source	
Wood recycling projects	32	(CWR, n.d.)	
Scrapstores	63	(Reuseful, n.d.)	
Freegle groups	~400	Survey	
Freecycle groups	616	(Freecycle, n.d.)	
Litter-picking groups	~2000	(Wollaston, 2020)	
Item-lending libraries	~30	Survey, web search	
Reuse stores [Reuse	200	(Reuse Network, n.d.)	
Network]			
Repair cafés	132	(Repair Café, n.d.)	
Charity shops	11 200	(Charity Retail Association, n.d.)	
Total	14 673		
Total without charity shops	3 473		

Table 3.5. Number of UK CWPs. This table shows estimated and hard numbers for different CWPs. Most numbers are collected from network websites and reports; some are estimates based on web searches, based on others' estimates, and based on survey data.

3.3.2 Semi-structured interviews

Semi-structured interviews constitute the bulk of my data. This method was used, and considered the most useful, because I was interested not only in the social context within which each case is situated, as well as the individual-but-relational aspects, but also what each group does, how it is organised and what they have achieved and failed at, and how these ground, frame and follow from each other.

Semi-structured interviews are characterised by the researcher having an interview guide that can steer questions and directions, while remaining open to what the interviewee is interested in (Bryman, 2008). My interview guide(s) (see Appendix 2) was relatively simple and the questions were kept open and general, and in a relationally ethnographic vein, the questions also evolved along the course of my fieldwork. As is evident in the interview guide, I did not specifically ask questions such as "Are you a commons?" or "In your eyes, is your project marketised?". While this will have had an effect on the specificity of the answers, i.e. not every interviewee talked about marketisation processes, this also meant that whatever I did find, I did not put there, which follows from the awareness of myself as a research and analysis instrument (Coffrey, 2018). I piloted the interview guide with one community-based waste organisation local to Norfolk. I prepared my test interviewee as I would for subsequent interviews, but also encouraged them to comment on and review the questions I asked and my interview style during the interview itself. This moment proved to be immensely helpful, as it made me pay thorough attention to wording as well as the logic behind asking certain questions. Following this, I reworked my interview guide according to the feedback I got during the pilot.

The recruitment of interviewees was mainly done with the help of my contact person in each case, with the exception of SOT. Here, I worked alongside an external consultant to enlist interviewees that had indicated that they were interested. I tried to ensure diversity between respondents in all cases – based on age, gender, history with the group, role in the group and so on. One factor that was lacking, except in the SOT case, was diversity in ethnicity, something that stemmed from that the groups themselves were very homogenous. As will become evident in Chapter 5, this was of concern to GT. As interviews went on, I realised that some of my questions needed revision and even omission, but as the aim of the interviews was nowhere near the quantifiable dimension, I did not perceive this as a problem.

In total, I performed 35 interviews, which were unevenly distributed across the cases. My aim with the interviews was not an even distribution between the groups, nor to reach 'saturation' (Bryman, 2008), but rather to gather a variety of perspectives and roles across the cases. Table 3.6 below shows participants and the main theme of each interview.

Case	Name	Main theme
Glanhewch Taifon	Louise	Litter-picking is a means to an end, which is to come together
	Dennis	Litter-picking is a way to take care of your community and meet people
	Rose	Litter-picking can spark community action, pride and cohesion
	Don	Litter-picking is a great way to do something about the problems you see
	Faye	Litter upsets, but it's nice when people come together to solve it
	Mal	Taifon has no community spirit, but picking litter feels like a small win
	Michael	Picking litter feels good, because you get to solve a problem, meet people and see new places
	Andrew	Everyone has responsibility in the litter problem

The Stuffotheque	Cecilia	Being part of SOT feels meaningful and improves your sense of community
	Connie	SOT is good for things you don't want to own
	Lena	SOT is a solution to large-scale problems
	Arlene	SOT is a great way to save waste and build community locally
	Camilla	SOT gives hope and is a solution to the waste problem
	Erin	Sharing can unify a community
	Thomas	SOT is necessary and contributes to people learning new skills
	Carol	Libraries are important hubs that need to survive
	Jacob	SOT saves you time and resources, and contributes to community cohesion
	Leida	Grassroots action has small impacts, but is very important
	Dan	We need to fundamentally change how society works and SOT could be part of this
	Colin	Volunteering for something like SOT can help you overcome isolation
	Andrea	SOT will develop into what it needs to be to meet people's and society's needs
	Sally	SOT is something that needs to exist and needs to work to change people's perceptions
	Elisa	SOT was born out of need and out of passion for community and the environment
The Reuse Collective	Annie	TRC is important for education around waste and can act as an example
	Nathan	Waste creates opportunities to educate, create jobs and build community
	Stephanie	TRC is possible because of the community spirit in Thornbridge
	Roy	TRC provides necessary waste facilities and creates important volunteering opportunities
	Kelly	Thornbridge has a vibrant community that has enabled TRC
	June	TRC is a positive counter-balance to big problems in the world
	Sylvia	TRC extends the life of things and can teach people important skills
	Kathy	TRC makes people think about waste and reuse
	Cam	TRC is founded on fair values and is an integral part of Thornbridge
	Adrian	TRC has a great community that people respect
	Jane	TRC can help people become part of a community
	Eddie	TRC has provided Thornbridge residents the opportunity to experiment and create a solution

Table 3.6. All interviewees in this research, by their pseudonyms, with the main theme of each interview. It should be noted that each interviewee of course spoke of a wealth of topics and thoughts, but there were still recurring themes in most interviews, which have been distilled in this table.

After a handful of interviews, I had all but internalised my interview guide and could ask questions without referring to it, as well as in the 'wrong' order and still remember all of what I wanted to touch on. This became particularly helpful in the Glanhewch Taifon case, as the particular interview types I performed here were the walking interview as well as researcher volunteering. Walking interviews are useful when exploring connection to place (Kinney, 2017). They also allow researcher and researched to level and remove some of the discomfort associated with seated and 'unnatural' interview formats (Kinney, 2017). Researcher volunteering is when the researcher partakes in volunteering activities that are undertaken by study participants, something that can be useful in participatory and/or emancipatory research projects (Williams, 2016). I knew beforehand that I would litter-pick when visiting Taifon. As GT meets once a month for two hours, I had to time this well, and also knew I would not be able to interview everyone during the picking. I thus chose to combine the walking interview with the volunteering interview for these data collection moments. This was very useful, as interviewing someone about litter-picking while litter-picking offers a unique insight into the experience of litter-picking.

3.3.3 Field diary and observation

As this research was informed by ideas and ideals from ethnographic lines of thinking, I kept field diaries throughout my fieldwork. I use the plural of the word 'diary', as it was not *one* place, one notebook, but rather a collection of various moments and thoughts through different techniques. I will in this section briefly go through how I captured these moments and what they contributed. Excerpts from my field diaries are available in Appendix 3.

Throughout my fieldwork I attempted to pay attention to all impressions, not only those which were formally recorded in my interviews, but also the thoughts I had before and after interviews, the impressions I got from participating in various meetings, events, parties, and workshops, as well as what I saw when I sat back and watched and listened. Sometimes these thoughts were only possible to collect afterwards, sometimes I could jot them down as they appeared within my realm of consciousness. I made space after each interview to reflect, but I was also constantly open to recording what I saw, thought, felt, and was told outside of interviews.

Most of these impressions were *noted*, meaning I wrote them down in a notebook, but also sometimes on my phone, computer, a random piece of paper or my hand – whichever was available to me in the moment. In Casdwr, I performed walking interviews (as detailed under Section 3.3.2), which, coupled with the strain of listening and making sense, left me incredibly fatigued. Most of my 'notes' from these visits are in the form of audio recordings with only myself talking. I also took photographs with my camera or phone.

Coming back to participant observation, as practiced in ethnographic research – I do not view myself as having done clear-cut participant observation. I did not go into the field with the aim to use observation as a method, on par with interviews, neither did I only observe people. However, the 'data' that I gathered through this less-than-proper observation was incredibly useful. My observations were also less focused on people, and more centred on contexts, surroundings, and situations. Further details on how my field notes and observations were used in my research are collected below, under Section 3.4.3.

3.4 Analysis and theorising

The data I collected throughout my fieldwork was based on the survey, the interviews, as well as my observations and field diaries. These were all analysed, and I will here outline how I went about this project, as well as justify my choices.

3.4.1 Continuous and (sub-)conscious analysis

As this research has been motivated by ideological, theoretical, and real-world interests and drivers, my mind has been in analysis mode since the day I started. To claim differently would be dishonest. This has been a process that has been going on at the fore as well as back of my mind, with many moments of documentation. This documentation has largely been in the form of a research diary, with entries spanning between single words (less helpful) to multiple pages (more helpful) (see Appendix 3 for example entries). Beyond mere documentation, this form of unstructured, and sometimes subconscious, analysis has continuously created the path that I was on. From the early stages of reading literature on commoning and waste, my mind has continuously asked 'what does this mean?'. As has been laid out in previous sections, choices that delineated my research focus were constantly made – I chose to include litter-picking, I chose to focus on alternative forms of ownership, I chose to drop certain interview questions in favour of others, and so on. For the ethnographer, while I am far from a pure one, this constant analysis is part of the research process (Coffrey, 2018). This furthermore provided the foundation for my subsequent, structured analysis (detailed

below). While the interviews form the bulk of my data, the survey was still a crucial part and moment. Before I dive into the world of coding and theorising, I will briefly detail how the survey data was analysed.

3.4.2 Survey – descriptive and thematic analysis

The aim of the survey was never to perform any in-depth statistical analysis, but to explore and understand what existed. As explained in Section 3.3.1, the questions were more often than not text questions with open answers, however, some questions were organised as single- or multiple-choice. Because of this combination, a combined approach of basic descriptive representation and thematic analysis was adopted. The questions that were asked as single- or multiple-choice are not *analysed* per se, but only pooled and represented. These questions were focused on type of organisational form, year of initiation, geographic location, budget, income streams, and so on. In contrast, the questions that were open-ended and asked for text-based answers were analysed according to emerging themes (this analysis is presented in Chapter 4). The aim of this stage of analysis was still descriptive and exploratory, meaning very little connection was made to theory. Thus, the analysis was performed by isolating questions, doing basic coding based on emerging themes, and pooling themes together. Figure 3.3 below outlines an example of how this was done.

Figure 3.3. Example of how survey analysis was performed.

Survey coding example

The question "What would you need to overcome these challenges?" was asked (as a follow-up from "If any, which challenges has your group faced?"). Below are three answers that were given, along with the code that I gave to that answer.

"Better public sector funding models for both third and public sector." Code: Funding

"Further and continued exposure of the Repair Cafe movement." Code: Publicity

"More community-minded people inclined to volunteer." Code: Volunteers

To this questions, 31 respondents answered or mentioned funding; 14 publicity; and 14 volunteering. Again, this survey and its analysis were not performed to be representative, nor say anything about statistical relationships, but to explore, explain and paint a picture.

To further exemplify how the coding was done, the box below (Figure 3.4) utilises the question "Does your group feel that you have had any other successes, beyond your aims?" to show the coding tree for this question.

Coding tree – survey data

Responses for question: "Does your group feel that you have had any other successes beyond your aims?". Each top-level code is exemplified by sub-level codes.

- Making friends
 - Made friends
 - Supporting each other
- Community benefits
 - Community spirit
 - Bringing people together
- Benefits for disadvantaged
 - Vulnerable adults
 - Reducing isolation
- Job/volunteer opportunities
 - Creating jobs
 - Creating volunteer opportunities
- Positivity
 - Positive outlook
 - Good feeling
- Putting reuse on the agenda
 - o Raising reuse profile
- Raising awareness
 - Encourage reuse
 - \circ Creating discussion
- Spreading inspiration
 - Helped set up similar project
 - Engagement with LAs and larger organisations
 - Positive engagement with LAs
- Bringing groups together
 - Connecting groups
 - Collaborating with other groups
- Benefit for individual group no individual sub-level code
- Achieving plastic free status no individual sub-level code
- Supporting skills development no individual sub-level code
- Awards no individual sub-level code
- Other no individual sub-level code

Some of the successes reported were very specific, and some could only be grouped as e.g. a general benefit for the group. These were included in the analysis, but excluded in the presentation of the data in Chapter 4, due to a focus on the most relevant and recurring data.

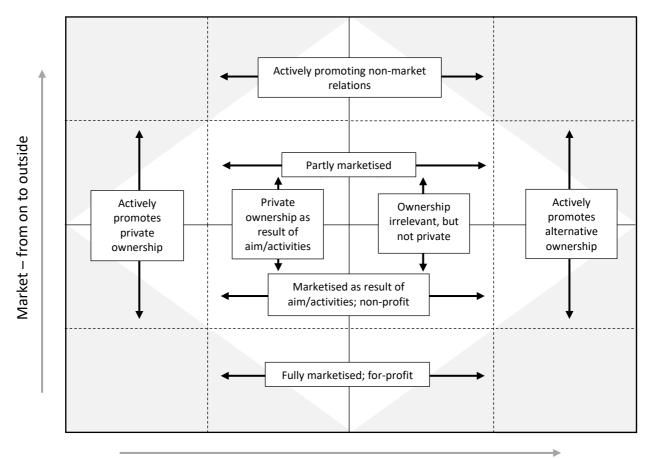
Figure 3.4. Coding tree for survey data.

3.4.2.1 Commoning features

The survey included 12 questions with the purpose of 'teasing out' commoning features in each respondent group. The questions were still relevant for other purposes, but were intended for an additional, separate analysis. Based on the upgrade workshop, however, I decided to focus solely on *outside the market* (or *non-commodification* as I called it at the time) and *alternative ownership*. As such, only five questions were appropriate for additional analysis. These were:

- 1. Do any of your activities involve someone purchasing (by a financial transaction) anything from you?
- 2. If you answered yes to the previous question, what happens with this money?
- 3. Which of the following describes your group's (waste or waste prevention-related) activities best?
- 4. What are your group's stated aim/s?
- 5. Does your group have any other informal aims?

Other information from the survey that was deemed important for this moment, but which was not specifically asked for, included e.g. the provision of free services, being communitybased, being membership-funded etc. Based on each respondent's answer to these questions, it became apparent whether or not they practiced non-market forms of organising as well as relied on promoted private or alternative forms of ownership. From this, each respondent was plotted on a matrix with axes corresponding to *relation to market* (from *outside* to *on the market*) and *alternative ownership* (from *alternative* to *private*). To nuance and tease out radicality, each quadrant was home to another quadrant. The base matrix is shown in Figure 3.5. overleaf. To make the plotting process more accessible, Figure 3.6, also overleaf, exemplifies this process utilising a wood recycling project from the survey. Figure 3.7 on p. 106 shows this plotting divided according to CWP type.



Ownership - from private to alternative

Figure 3.5. Unplotted matrix. Each row in the matrix is defined in the box on that row.

Example of plotting process: community wood recycling project

Outside the market

1. Yes

2. It pays for bills, it pays for new capital items, it pays for salaries

Alternative ownership

- 3. Wood recycling project
- 4. To reuse timber
- 5. No informal aims

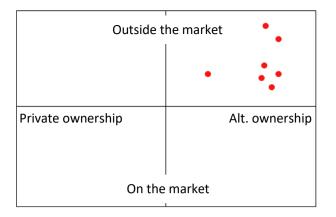
Other factors

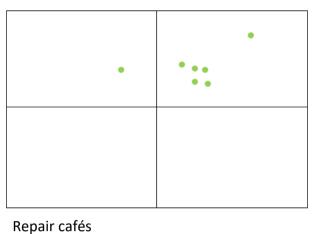
This community wood recycling project is non-profit; timber sold could be used for either individual or collective purposes.

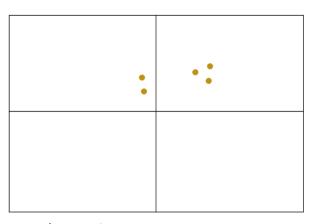
Position on matrix

Because this project sells timber, they operate on the market. They furthermore do not rely on or promote alternative ownership forms. However, they are non-profit and use most of their income for bills and salaries. As such, they were placed in the lower left quadrant, but the upper right corner of this quadrant. Visualised overleaf.

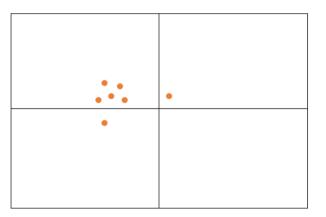
Figure 3.6. Exemplifying the plotting process.

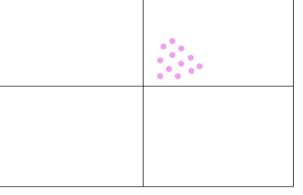




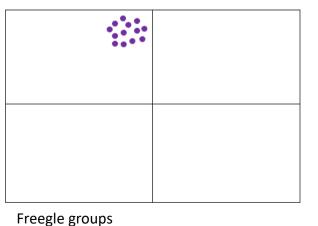


Libraries*

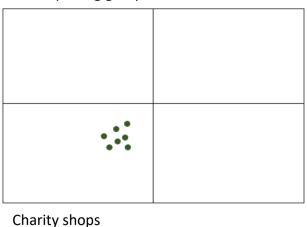


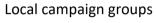


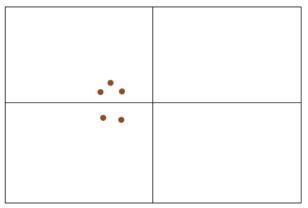
Scrapstores



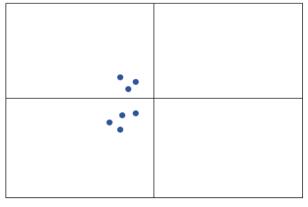
Litter-picking groups







Wood recycling projects



Reuse initiatives

Figure 3.7. Survey respondents plotted on matrices. Each matrix shows a different type of CWP. The X axis is ownership, from private to alternative; the Y axis is position in relation to market, from 'on the market' to 'outside the market', following two of the five commoning features. * = these labels apply to all matrices.

3.4.3 Observation

Leaving the survey analysis behind, I will start this sub-section on my case studies by turning back to the observations I performed during fieldwork. Relatively little of these notes and observations have made their way into my thesis, but this does not mean that they were irrelevant. Their role in my research was to help make sense of a context and interaction. They also *showed* me the things that cannot be explained, for example community. They also made me pay attention to things that interviewees brought up, as I saw them transpire or I saw the physical or social setting in which they had transpired. As mentioned previously, I performed very little *participant* observation, but rather *context* observation, i.e. I paid less attention to what people were doing, and more attention to the settings they were doing it in. Table 3.7 collects the themes, aspects, and principles I were able to glean from observation. These are themes that emerged throughout my stay in each location, throughout conversations and chats, events and meetings. The field diary and observations were not analysed in any formal pattern, but they shaped my impressions and provided a contextualised foundation on which the analysis of the interview data rests.

Contextual themes	Glanhewch Taifon	The Reuse Collective	The Stuffotheque
Community/ interaction/ sociality	Conviviality in interaction amongst litter- pickers	Close-knit, respectful, and appreciative relations between participants	Difficulty establishing community relations through borrowing
Infrastructure	Parks, road-ends, lack of bins contributing to littering	Tight streets, no parking, no thoroughfare leading to town becoming isolated	Busy area, calm library, creating a protected hub/bubble from the bustle outside
Presence/absence of waste	Litter and fly- tipping being everywhere	Reuse centre inundated with items and materials	Borrowable things neatly and tidily ordered
Atmosphere	Convivial, lively, relaxed	Bustling and lively	Busy and noisy on street; calm and welcoming inside library

Table 3.7. Contextual themes emerging from observation. These have contributed to shaping my research.

3.4.4 Interviews – coding and analysis

The 35 interviews conducted were transcribed in their entirety before being formally analysed. The chosen method of analysis was thematic, which is something that fits with ethnography and case research (Coffrey, 2018). Thematic analysis is not a rigid stencil that is applied, but rather a broad framework for how data is engaged with. The first step, if one's data is written (e.g. documents or transcripts), is to code. Coding can be done in a number of ways – for example by reading for the presence of certain themes in line with research questions, reviewed literature, or theoretical frameworks; it can also be done in an 'emerging' fashion, meaning that text is read and themes are allowed to emerge, however often in relation to topics one is interested in researching. Coding, however, is not the actual analysis, but rather a way of representing the data in a more succinct way, while at the same time retaining its richness.

I coded my data in two ways – according to my theoretical frameworks as well as searching for 'emergence'. Emergence, in this instance, means that codes and themes that were relevant to my research questions and to the general theoretical domain I am situated within appeared in front of me. My theoretical frameworks, on the other hand, (presented in Section 2.4) specifically outlined five features of commoning – meeting a need, bottom-up, cooperation, outside the market and alternative ownership – as well as how waste can be interrogated from a parallax view.

The coding process itself was made up by six steps, which is outlined in Table 3.8 below. I decided to not use a coding software, but did steps 1-3 on paper. Steps 4-7 were simply performed in Word and Excel. I chose to do it this way, as it made me feel closer to my data. One important note is that this process was not entirely linear – I essentially performed steps 2, 4 and 5 a second time for the waste framework. The decision to add an additional layer of coding and analysis was made after the first round was already completed.

Step	How	Outcome
1. Initial skim reading	Each transcript was briefly read.	Overview of each transcript.
2. Initial coding	The five commoning features and	A list for each transcript of
a) Framework coding	the three waste features were opened up to nuance and diversity by focusing not only on their exact meaning, but also on related meanings. Transcripts were read in search of feature-relevant codes.	feature-relevant codes, along with the relevant excerpt. For most interviews and different cases, some features stood out and others remained in the background.
2. b) Emergence coding	Transcripts were read again, this time more openly, but still in search for theory-relevant codes.	A list for each transcript of emerging, but theory-relevant codes, along with the relevant excerpt. Some emerging themes were found across cases and interviews, while others were specific for case and/or interview.
3. Interview-specific categorisation	Each transcript code list was further categorised, i.e. codes were merged under broader headings.	Category lists for each transcript.
4. Case-specific categorisation	The category lists for each transcript were merged under each case and further categorised. Categories for emerging codes underwent an additional categorisation into so- called top-level codes.	Category lists for each case.
5. Case-specific category matrix	Category lists for each case were put into a matrix, including summaries, comments, relevance and 'headline'.	Matrix, or table, for each case collecting all categories and summaries of each top-level code.
6. All case category matrix	All matrices were put together into one document.	A multi-case document collecting all top-level codes and their summaries for all cases.

Table 3.8. Steps in the coding process.

The matrices created in steps 5 and 6 were hybrids between coding and analysis. Here, the codes were woven together under each principle, and were subsequently summarised and commented on. This clarified which aspects of the commoning features, for example, that were more visible in each case, and which were not. To further detail how the interview data was coded, Figure 3.8 below shows how this was done for the commoning features, the waste framework, and emerging codes.

Coding tree examples - interview data

Within the frameworks, commoning features and aspects of waste were considered top-level codes, i.e. no further categorisation was made for these. Emerging codes were categorised, i.e. the example of 'community' below is a top-level code and those in the bullet-point list are sub-level.

Commoning feature: meeting a need (The Reuse Collective)

- Educating the public about waste (Annie, Nathan, Stephanie, Roy, Kat, Adrian)
- Teaching skills (Kat, Kelly)
- Providing a needed waste service (Annie, Roy, Sylvia, Cam, Adrian, Nathan, Kelly)
- Model and example (Annie, Nathan, Stephanie, Roy, Adrian)
- Creating job opportunities (Annie, Roy, Kelly, June, Jane, Eddie, Nathan)
- First need was compost (Nathan, June, Eddie, Stephanie, Jane)
- Helping unwanted things find new homes (Kat, Cam, Jane)
- Putting recycling and waste on the agenda (Sylvia, Jane)
- Reducing waste of resources (June, Eddie, Adrian)
- Providing social opportunities (Sylvia, Jane, Nathan)
- Attracting visitors and new residents to TB (Kat, Sylvia, Stephanie)

Waste framework: representation (Glanhewch Taifon)

- Litter-picking brings people together (Louise, Dennis)
- Feels good to activate the community (Faye, Michael, Don, Louise)
- Litter-picking can be positive (Don, Rose)
- Feels good to pick litter (Dennis, Don, Mal, Michael)
- Litter is upsetting (Faye, Don, Michael)
- Litter is disgusting and unpleasant (Rose, Faye, Michael)
- Litter shouldn't exist (Don, Rose, Mal)

Emerging codes: community (The Stuffotheque)

- Community is to feel safe and at ease somewhere (Connie, Camilla, Arlene)
- Community is to have a connection to people in your area (Thomas, Jacob, Cecilia, Lena)
- Community is local (Leida, Connie, Thomas, Camilla, Andrea)
- Community is to care for and be cared for by people in your area (Erin, Andrea)
- Difficult being part of community while working in the city (Cecilia, Lena, Colin, Camilla)
- SOT needs to have a clear presence in the community (Cecilia, Camilla, Jacob, Dan, Thomas, Andrea)

Figure 3.8. Coding tree for interview data.

The step after the coding and matrix creation was a deeper analysis. This was not one of extreme specificity, but it was still driven by my theoretical frameworks. It was further performed in combination with writing: the framework-driven codes were woven together and anchored in the theoretical frameworks of organisation and waste. Emerging themes provided pieces of the puzzle and thus ended up mainly supporting the main analysis. The combination of these theory-driven and data-driven themes allowed me to engage with *theorisation*. Coffrey (2018) describes this as an optional next step in the analysis process. Ethnographic research can, if the researcher wants to, stop at description of context, experience and meaning (and this can be called analysis), but for those so inclined, an extra piece of work can be done here. As this thesis strongly engages with theory and attempts to understand and make visible struggles and possibilities beyond mere description, this was a key move. This process, more specifically, was performed by more thoroughly engaging with my theoretical frameworks and the questions these posed (see Section 2.4). Figure 3.9 visualises the process of theory-driven coding with subsequent theory-driven analysis.

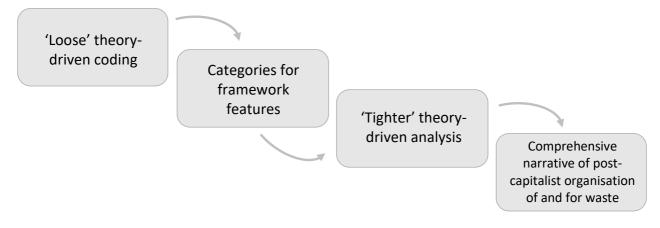


Figure 3.9. The steps from coding through to analysis.

In reality, however, the process of analysis was not exactly linear nor divided into clear-cut moments in time. As mentioned above, analysis happened all the time, and even though coding is a form of data organisation, this was still an important part of the analysis. In step 5, as outlined in Table 3.8, the summaries and commentaries further provided the foundation that the subsequent analysis departed from. This step in the analysis process – the one labelled 'tighter' in Figure 3.9 – was intimately intertwined with writing up. Thematic analysis of qualitative data, and the process through which this was performed, is always challenging

to completely convey through text-based description. Figure 3.10 below therefore exemplifies the stages from coding to categorisation to analysis to writing up, based on the steps outlined in Table 3.8.

Coding and analysis process exemplified – Glanhewch Taifon and need meeting

Step 1. Raw data – quote from interviewee Louise

"Yes, there is litter all the way round, but in many ways it's more than litter-picking. The groups, it's like you start with litter-picking, but you can increase and start with any activity that brings people together around a common cause." (Louise)

Step 2. Initial coding / a) framework coding – drawing out key points *Initial code:* Litter is not the goal, a joint activity is

Step 3. Interview-specific categorisation – categorising codes on interview level *Category:* Litter-picking is a means to an end

Step 4. Case-specific categorisation – categorising further on case level Litter is a gateway to activating the community (Louise, Dennis, Rose)

Step 5. Excerpt from commentary

"Litter-picking groups meet multiple needs simultaneously. [...] One of the main aims that the group(s) has/have is to activate the community, and doing so by organising something very practical, immediate, positive and local, i.e. litter-picking. This has the dual effect of reciprocating community, as well as clearing and cleaning streets and improving green spaces." (see Appendix 4 for example of matrix)

Step 6. Excerpt from Chapter 6

"State and market cannot, to the extent that a community can, meet any needs for community and related social needs – these can only support and remove obstacles. A space or moment for *doing in common* is seemingly a prerequisite for community creation." (p. 206 in this thesis)

Explanation of process

From the raw data presented above, I shortened this into a code that fell under need meeting. I interpreted the respondent's statement as indicating that litter-picking does clear streets, but that the need the group attempts to meet is a stronger community. The respondent mentioned this several times, and an interview-specific category was created. Through the interviews, two more respondents mentioned the same thing, and these were turned into a case-specific category. This was then summarised and explained in a short commentary (such as the one in Appendix 4). This provided a piece of the overarching narrative, which was then put up for combined analysis and writing up. In this stage, more detailed attention was paid to the commoning framework and the feature meeting needs - as shown in the chapter excerpt above.

3.4.5 Writing up

While the overarching narrative and story had been created, writing provided the forum in which the analysis took place, developed, and was cemented. The process of writing up proved to be a substantial and pivotal aspect of the analysis and research process itself.

In order to advance the argument presented in this thesis, the chapters are written in a funnelling way, starting broad with the Community Waste Movement in the first chapter. The second chapter comes closer to the ground and descriptively presents the three cases. It is also here that the role of waste is presented. However, it was mainly through writing Chapters 5 and 6 that I could finally make complete sense of my data, codes, categories, and analysis. These two chapters wove analysis, theory, relevance, and implications together.

The amount of data, number of codes, analytical pieces, and potential content created throughout this project are far too large, numerous, broad and deep to be possible to present in a cohesive and accessible thesis. As such, writing up was not only a space for analysis, but also a space for constant negotiation over what should be included and what could be omitted. This was a difficult process, as I cherish the rich and wonderful details of all cases and everyone I have spoken to. Nevertheless, this process needed to be done, and this mainly happened during writing up. As such, careful deliberation was paid to relevance, while still retaining the diversity of perspectives and accounts. The pieces that were kept were those that most succinctly told the story of organising a real-world community-based waste initiative.

3.5 Ethical considerations

Any research into the world of living beings must pay due diligence to the realm of ethics. This thesis is entirely based on people and what they do, with a relative sliver of attention being given to physical contexts and more-than-humans. As such, ethical considerations were given to all parts of the research process. For each piece of data collection, ethics approval was sought and granted by the UEA Research Ethics Committee. These applications consisted of a form and an additional research proposal outlining methodology and how I would ensure that my research was performed according to UEA Research Ethics Guidelines. As my research neither jeopardised the safety of my participants nor anyone else, the ethical considerations

largely revolve around anonymity, consent, power relations and representation. These are detailed in the coming sections.

3.5.1 Consent and anonymity

Consent is an important part of research: it was sought for all data collection moments, except for observation (the consent form can be found in Appendix 5). It is often practically impossible to seek the consent of everyone who features in one's observations, but where I could, I informed people that I was a researcher. For example, on litter-picks, I was introduced as a researcher and that I would take part in the picking, chat to people and take notes. The survey contained an introductory page, which included a tick-box for consent. At the start of each interview, the interviewee was informed of the aims of my research, and was then asked to sign a consent form. All respondents were given a date up until which they could withdraw the consent they had given.

Every group and individual that have taken part in this research appear as anonymous in this thesis. Survey respondents had the option of demanding anonymity, but I decided later to use only a label (e.g. charity shop) when describing these, regardless of what they chose. All interviewees are anonymous and I use pseudonyms to ensure their anonymity. After deliberation, I also decided to make each case anonymous as well. This was a difficult decision, one that I have doubted many times since, but the rationale was two-fold: firstly, I wanted to make sure that participants felt free to comment on everything they wanted to, in case anything critical or sensitive came up. Secondly, I wanted to retain the possibility of being critical myself. This latter reason is one I have battled with throughout my PhD, and it will receive further attention below, in Section 3.6.3.

3.5.2 Power relations

Uneven power relations is something that needs to be paid attention to in interviews. I was acutely aware that I was the researcher, that I was the one who wanted something from those I interviewed, and this unevenness often made people feel uncomfortable. I always attempted to be as amiable and relaxed as possible, and assured respondents that they were in charge, that they could leave at any time, and that they could refuse to answer any or all questions.

Even if I attempted to the best of my ability to ensure that interviewees felt comfortable, in charge and not forced to go through with the interview if they felt awkward or nervous, I could not guarantee that this was not the case. I also informed respondents that their participation helped not only me, but also their group, as I had promised to make my findings available and useful to each case. Even so, the fact remains that I was the one who wanted something from my interviewees, which is something that cannot be overcome in case study or ethnographic research. Interviews were closed with the question "Is there something you thought I would ask, that I didn't?", which allowed respondents to fill in what they thought were gaps in my interview guide. I also gave them the possibility to ask me questions in return, which many did, including the chance to email me with further thoughts and questions.

3.5.3 Representation

This research is, as has hopefully been made clear at this point, interested in aiding in the making visible of alternatives for justice and sustainability. I follow a constructivist and critical theory approach, and want my research to support the normalisation of other ways of organising around waste, as well as the normalisation of imagining seemingly impossible things. While not employing a participatory action research methodology, any research that aligns with e.g. diverse economies ideals should at least heed the co-productivist notions contained therein. While I have spoken to each group to understand what they wanted in return and out of their participation, and subsequently tailored my research according to their wishes, my research is not co-produced in an ideal DE fashion.

As is good practice, I have attempted to represent my groups the way that they want to, fairly, as well as account for all the diversity and nuance they and their participants exhibit. Having said this, one reason that I anonymised the groups entirely was to ensure that I retained the possibility to critically analyse the activities and aims of each group. This is, again, a blurry area, where groups might not entirely support some of the critical analysis I put forth, as they perhaps prefer to see themselves in a more beneficial light. Here, I want to strongly emphasise that I what I am critical of is not the actions and decisions of the groups themselves, but rather the structures and systems that force certain decisions, dictate certain actions, and facilitate certain directions. Thus, what I am representing is not only the groups themselves, but also the system within which they, and the rest of us, find ourselves in. I am a friend, and I want to support what these groups do, but I will do so critically, so that the visibility-making that is practiced is not only for the benefit of the groups themselves, but also for everyone else who struggles in a coercing system.

3.6 Concluding remarks

Before community-based approaches to waste and their potential for post-capitalism are introduced and extensively dealt with, what remains here is thus only to provide a few final words for the journey ahead. This chapter has detailed the process that I have laboured through in order to produce this thesis and its contributions to knowledge. Taking a critical theory standpoint has meant that my data collection and analysis have not only been driven by an aim and desire to create new and academically relevant knowledge, but also by a desire to have an impact on the world. While this might sound like a grand claim, the fact remains that critical theory, research on community, and efforts of finding more sustainable waste systems and practices are normative, meaning they do not only describe the world *as is*, they also infuse the knowledge created with should and could be. In no part of this research process have I attempted to claim otherwise. Furthermore, this thesis itself is a testament to the transparency I have deployed – as will become evident over the coming chapters, I present community action, waste, and post-capitalism not as neat, uncompromising, and absolute categories that cannot be critically examined, but rather as a fluid, messy, and pragmatic field, within which exists great diversity in organisation, context, and individual and collective wills and opinions. The groups furthermore deal with a high level of complexity both in terms of a co-opting system, as well as the physical complexity of modern-day wastes. Due to this complexity as well as the fact that *accessing reality* is an inherently challenging project, I also accept that my accounts, analysis, and presentation are partial, and could, in fact, never reach any kind of completion. As such, the chapters ahead are written to, with as much clarity, transparency and fairness as possible, account for this complexity that community waste initiatives face every day, and that I, too, have faced in the process of attempting to do them justice.

Chapter 4: The characteristics and possibilities of the UK Community Waste Movement

This chapter will introduce the Community Waste Movement in the UK and will draw on the survey performed as part of this research, outlined in Section 3.4.1. As was explained there, the purpose of performing the survey was twofold: 1) it created a sampling pool for case studies; and 2) it aided in painting a picture, and deepening our understanding, of the accumulation of community, civil society, and third sector action on waste and waste prevention in the UK. The aim, more specifically, with this chapter will be to answer RQ1:

RQ1: What are the characteristics and possibilities of the UK Community Waste Movement?

Briefly revisiting the distinction between *approach* and *project*, which was outlined in Section 2.3.1, *approach* is used as a conceptual tool, signifying an activity or a way of organising, e.g. community-based litter-picking in general, whereas *project* refers to real-world entities, such as an existing litter-picking group. This chapter will begin with the latter – *Community Waste Projects* (CWPs for brevity). Their definition is partly rendered from previous research on community waste (Sharp & Luckin, 2006), and partly developed further to encompass more such projects:

A Community Waste Project is a regional or local; formal or informal; non-profit, communitybased, or third sector; organisation, project, initiative or group, which deals with waste or waste prevention.

As such, their scale, level of formality, and exact choice of mode of organisation were at this point considered unimportant; them being based outside the public and the private sector, as well as their connection to waste, were viewed as key. Returning to the research question posed above, the *Community Waste Movement* (CWM) is the shorthand for the aggregation and accumulation of CWPs, and this chapter aims to characterise this movement and scope its possibilities. It will do so by first introducing this movement through its types, activities

and aims, followed by a look at challenges that face groups in this movement, as well as how they have overcome challenges in the past. The chapter ends by turning to possibilities – both immediate and present, as well as future potential.

4.1 Characteristics – activities and aims

The Community Waste Movement is a diverse, and includes many types of activities, waste, and forms of organising. Based on the definition of CWPs above, many different groups and projects with diverging characteristics and aims are encompassed by the CWM. While dealing with all kinds of waste, on different levels of the waste hierarchy, organised in a variety of ways, these groups also have similarities, as previously noted in Section 3.3.1. This section attempts to introduce this movement by exploring similarities and differences, focusing on which types of projects exist, which activities are undertaken, where they are situated, as well as what drives and motivates these groups. It does so by examining and presenting the survey data from a range of perspectives and in a variety of ways.

4.1.1 Community Waste Project types

'Type' of CWP refers to which kind of waste and which kind of activity a group targets and undertakes. Previous research (e.g. Luckin & Sharp, 2005) has mainly focused on the recycling and reuse activities undertaken within the CWM. In the decade and a half that has passed since community recycling had its "heyday" (CIWM, 2016, p. 8) the type of activity can be understood to have expanded – as outlined in Chapters 2 and 3, I employ a broadened definition of community-based waste approaches, which also includes lending on the one hand and litter-picking on the other. This broadening was due in part to a wider conceptual interest, but also a shift in activities and relevance. Item-lending libraries have, in the past five years, received increased societal and academic interest as a form of collaborative and sustainable consumption (Baden et al., 2020). Simultaneously, while litter-picking has been around for more than half a century (KBT, n.d.), social media has meant that these activities have become more visible.

The survey respondents serve to exemplify the types of CWP that exist, but do not represent all that is undertaken in the CWM. Table 4.1 and Figure 4.1 on the coming pages summarise, visualise, and explain which CWP types were reported through the survey.

120

Туре	% in survey	Description
Shop	17 %	This category includes non-profit shops that sell items for reuse, such as charity shops and scrapstores
Reuse/recycling/repair initiative	17 %	This is a diverse category, which includes those groups who undertake multiple activities involving reuse, recycling and/or repair of items and materials. They could be furniture redistribution initiatives, wood recycling projects, and upcycling initiatives that also sell items
Litter-picking group	16 %	This includes groups that undertake litter-picking as a main activity or one of many (e.g. care for a local nature reserve)
P2P gifting platform	16 %	Groups such as Freegle, where items are gifted, utilising an online platform
Repair organiser	11 %	Groups where the main activity is to host repair events
Item-lending library	9 %	This collects all types of libraries, including tools, clothes and books
Regional/national network/project	8 %	Regional or national networks which collect and/or support local iterations of community waste projects, also national-reaching projects (NB: these were not plotted on the matrix presented in Chapter 3 – due to their diverse nature and large scale they do not compare to other projects in the CWM)
Local campaign group	5 %	Diverse category where groups do not directly engage with waste, but rather campaign for e.g. plastic-free status
Other		There were some respondents that do not fall under the other categories. These were a composting group (which is a CWP), a county council and a for-profit lending platform (the latter two do not fall within the CWM, and are not included in <i>n</i>)

Table 4.1. Categories of CWP types, as found through the survey.

CWP TYPES

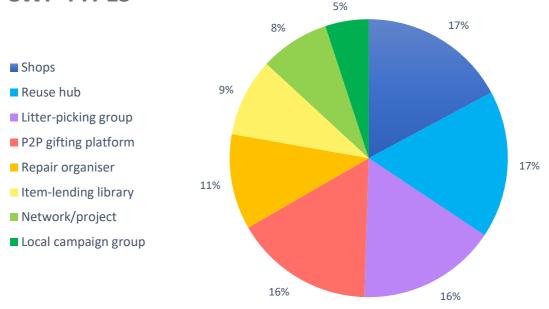


Figure 4.1. CWP types in the survey illustrated through pie chart.

The survey responses, while not being representative of the body of aggregate CWPs as a whole, do cover most of what is done by these groups. Before the survey was undertaken, however, a few other types of CWPs were hypothesised to exist and to respond. For example, certain types of shops with a social enterprise structure or cooperative buying groups, where the aim is to reduce waste, through buying in bulk, or being e.g. package-free, non-plastic etc., are not represented, but do exist. Another example is that of 'local campaign group'. Four respondents in total indicated that they represented such groups, and while they were indeed campaign groups (e.g. for plastic-free status or for less littering), this option was hypothesised to cover a more diverse range of groups, including, for example, local anti-landfill groups and anti-incineration groups, following previous research on CWPs (Davies, 2007;2008).

Most CWP types are explained in Table 4.1 or are relatively self-evident, however, the category *reuse/repair/recycling initiative* deserves further attention. This is the most diverse category, yet it collates a type of initiative that often combines a variety of waste-related activities. The sub-type *Redistribution* refers to those projects that receives donated items,

such as furniture, and then donates these to vulnerable groups. *Upcycling initiative* gathers those organisations that work with or facilitate upcycling, repurposing, repair, and so on. *Combined waste hub* refers to those initiatives that undertake a multitude of the activities in this map, such as providing recycling services, selling items for reuse, and organising repair events.

A final point should be made on *Regional/national networks*. While these networks are not practical approaches to managing waste on the ground, they still have an important role in the movement. They function as connectors, facilitators, and support, and can furthermore lobby and promote the individual causes that groups work for, such as less littering, more attention to repairability, or putting reuse on the agenda.

Only activities that fall under the first half of the waste hierarchy – prevention, reuse, and recycling to a certain extent – are done within the Community Waste Movement. Other, more complex, industrial practices, such as actual recycling (i.e. melting metal and plastic, pulping paper and so on), incineration, biogas production, and landfilling, are not practiced here. Confirming what was stated in Chapter 2, community-based approaches do not take part in industrial systems in the same way that conventional waste management strategies do. Most often, community approaches are focused on prevention, reduction, reuse, and repair. The times when community groups venture into recycling and other management activities, the waste is either not complex (e.g. garden waste), or the actual disassembling process happens somewhere else (as it does when a community group collects recyclable materials, and then send or sell these on for industrial processing). This is echoed by Williams et al. (2012): "it is clear that third sector involvement almost always moves waste and resource management up the waste hierarchy from disposal to recovery and reuse" (p. 1739). Litter-picking is the one activity that neither manages, nor directly prevents, waste, but rather keeps it out of e.g. natural areas. Further building on the typology map on the previous page, Figure 4.2 introduces the community-based waste hierarchy.

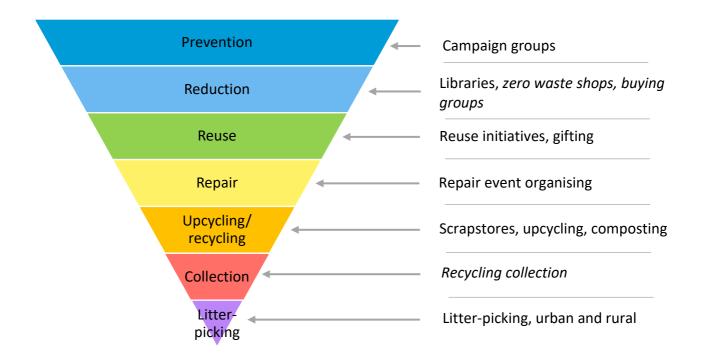


Figure 4.2. The community-based waste hierarchy. This is based on the conventional hierarchy, but with added emphasis on what is practiced and organised at the community level in the UK today, as well as where specific approaches and CWP types fit in.

4.1.2 Geographical mapping of Community Waste Projects

Survey respondents were asked in which county they operated, in order to allow for a geographical comparison (see Figure 4.3 overleaf). Unsurprisingly, most CWPs operated in English counties (82 % of respondent groups), followed by Welsh (9 %) and Scottish (7 %). One group from Northern Ireland responded to the survey.

The map on the next page (Figure 4.3) shows the geographical distribution of respondents, by type. Given the relatively small number of respondents, it is hard to draw firm conclusions about the geographical distribution of CWPs. Nonetheless, this mapping does reveal a few things of interest. Very few patterns based on type of project emerge, however. Litter-picking groups do appear to be found in the middle and south of England, as well as Wales. Most other types are seemingly spread out without pattern. What does stand out is rather the clustering of groups in different areas. The South-West seemingly houses many projects and initiatives, followed by London and the South-East, as well as the Midlands with a void along the eastern side of England. The north of England as well as most parts of Wales and Scotland are furthermore not represented in the survey data.

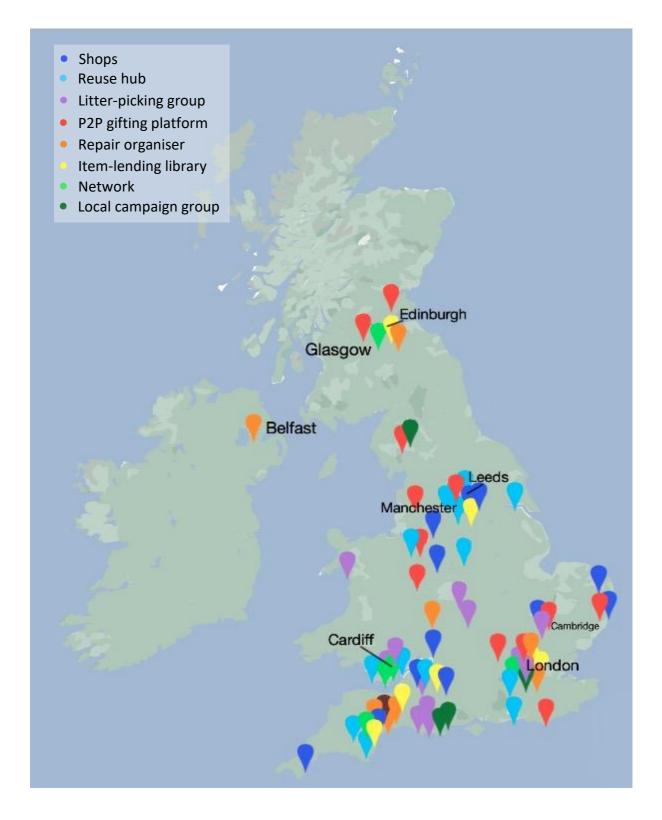


Figure 4.3. Geographical map with distribution of CWPs by type. Groups are plotted on approximate location, and not on exact coordinates, in order to protect anonymity.

Beyond initiatives operating where there are dense population clusters, the fact that many groups appear in the South-West is not surprising. Previous research (e.g. Longhurst, 2015) has identified this region as a milieu that can seed and nurture alternative initiatives and ways of living. The map further shows that a variety of project types are active here – the only one missing being P2P sharing platforms – indicating that there is a need and interest for different ways of working with and preventing waste.

4.1.3 Orientation of cause

One point where many groups converge is the motivation behind initiating the project. Granted, the reason for picking litter and the reason for opening a tool library are different, but the overall orientation of the cause could be argued to be the same. Previous work on community-based approaches to waste have all identified that many groups operate either according to environmentally or socially oriented causes, or a combination of both (e.g. Luckin & Sharp, 2004; Dururu et al., 2015). Here, survey respondents were asked the question 'Why was the group set up?', which generated a plethora of answers. As such, answers were grouped according to *orientation of motivation* behind setting up the project, i.e. environmental and/or social (shown in Figure 4.4). Confirming previous research, around a third of respondents were motivated by both social and environmental causes, 9 % of respondents' answers did not indicate their orientation – examples include 'available funding', 'took over service after council', 'already existed' and so on.

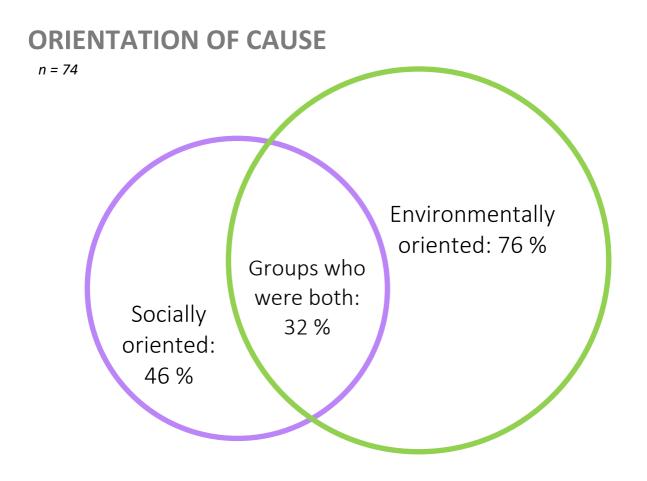


Figure 4.4. Venn diagram showing orientation of cause among survey respondents. Green circle is environmental orientation, purple is social. Three quarters of respondents had environmental causes, and around half had social. Of all survey respondents, 32 % were both environmentally and socially oriented.

The respondents, whose motivations are completely or partially environmentally oriented, often mentioned waste as reasons for starting their group. Responses varied between reducing waste, reducing landfill, increasing reuse, as well as setting up 'alternative recycling' for example. These different aspects of 'waste work' are often muddled together, seemingly signifying a general will to reduce the amount of waste that ends up in large industrial systems, such as landfill, incineration, and industrial recycling – meaning different respondents use different words, but essentially refer to the same thing. Other environmentally oriented reasons for setting up included responding to littering or fly-tipping, and a general concern for the environment, the climate, or resource management. These concerns were sometimes expressed passionately. One survey respondent wrote:

"Our world is inundated with things and whenever something breaks people choose to throw it away and buy new things because no one knows how to fix something anymore. Sometimes people don't have money to replace the broken item so they go without. We offer a community based informal group where local people can bring their broken things and chat with the volunteer members while it's being fixed. This creates bond within local community and reduces tons of waste we humans produce every year." (survey response – repair café)

The respondents whose motivations were completely or partially socially oriented, rather focused on generally building community and fostering a community pride and spirit, helping people, providing support for specific groups, such as the homeless, the disabled etc., promoting sharing, creativity and learning new skills, again echoing previous work on community-based approaches to waste (e.g. Luckin & Sharp, 2005; Dururu et al., 2015).

While Figure 4.4 shows the distribution of motivations across survey respondents, it does not entirely capture the complexity of the movement as a whole. Charity shops, for example, are often mainly socially oriented, and while their existence is vital, both for vulnerable people as well as waste arisings, they often do not work with specific waste goals in mind. In Chapter 6, I will return to this characteristic – complexity and multiple motivations and objectives – that groups in the CWM often exhibit. Even when goals are seemingly focused on the environment – clearing it of unwanted rubbish, reducing waste to large-scale systems, and preventing waste from even being created – *soft* goals, for example creating community, empowering locals, etc., are still an integral part of this movement.

4.1.4 Aims and objectives

Respondents were also asked to list up to five of their *stated* aims, i.e. aims that have been agreed and written down in some kind of guiding document, application, bylaw, statement etc. While similar to the previous chart and section, this is broken up in more detail and rather indicates the aims that groups work according to *now* – as something to reach – whereas motivation for setting up the group in the first place more relates to initial concerns, which might have developed into something else, something more thought-through, or something wider.

Figure 4.5 shows the most common aims and the percentage of respondents who mentioned it as one of their overall stated aims. Nearly half of respondents mentioned reducing waste and saving material. A third mentioned increasing or raising awareness around waste, sustainability, the environment, climate change etc. 27 % of respondents mentioned creating volunteering opportunities, in which people could do something meaningful, share skills and gain experience. The less common aims are included as a list, to highlight the diversity that exists within this movement.

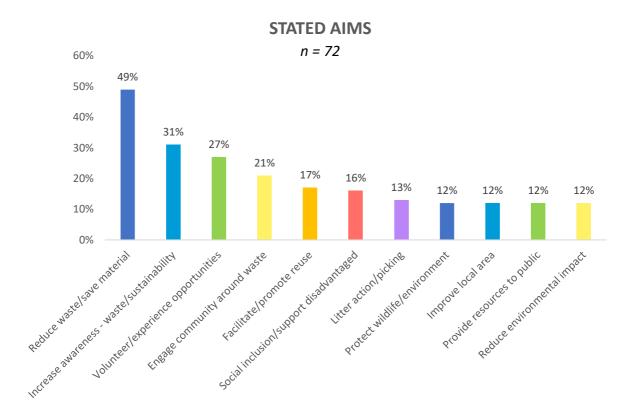


Figure 4.5. Bar chart showing stated aims of survey respondents. A variety of other aims were given, but were too few to include. Examples include 'Support others/each other', 'Financial/economic sustainability', 'Health (physical and mental)' and 'Fix/help fix things'.

Respondents were also asked if they had any other *informal* aims. The rationale behind this question was that groups might have agreed on aims when they started up their projects, but in reality, they might work according to more nuanced aims or a broader range of aims. Around half the respondents answered this question, and most responses fitted well with what the groups had set out to do:

"Create opportunities for people from different backgrounds and parts of the city to meet." (survey response – repair café)

"Raise awareness of the need for reuse and recycling." (survey response – second hand store)

"We hope to also be some sort of community and benefit those less well off." (survey response – Freegle group)

"Inclusion and access to technology and tools for all." (survey response – repair and maker hub)

Like the examples above, many of the responses were centred around building community and raising awareness, either around waste issues or social issues, as was mentioned in the previous section on orientation of motivations. Some groups also saw providing social benefits for their areas, their groups, or people who engaged with them in some way, as something that they were unofficially working towards. Other themes include creativity (most of the responses coming from scrapstores), local justice (an active stance on providing or claiming something for the benefit of the area or marginalised groups), and partnerships (building partnerships with other groups, LAs and businesses).

4.1.5 Organisational type

The graph below (Figure 4.6) presents the many different formats that are available for organising community groups. Most CWPs have organised themselves into either charitable companies (limited), or as informal groups – either independent or local iterations of larger networks/campaigns. Other versions that were also represented in the survey were community interest company and community benefit society.

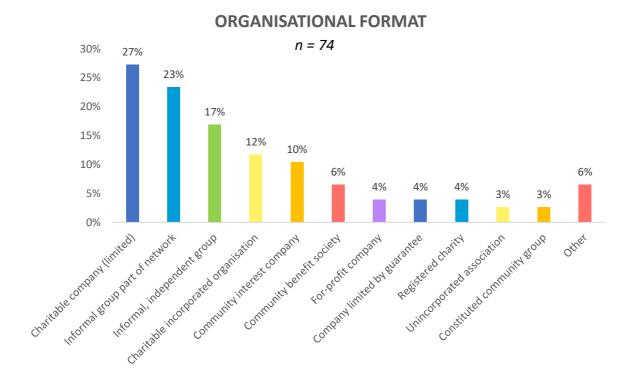


Figure 4.6. Bar chart showing how survey respondents choose to organise their projects.

Respondents were also asked why they chose a particular form or mode, and the most common reasons were reported as meeting needs for ease and flexibility, and being for the benefit of the community. More specifically, informal groups mentioned freedom, fewer strings attached and less responsibility for individuals as reasons for choosing not to formalise. Those who were informal, but part of a larger organisation, mentioned the benefits of receiving guidance, tools, insurance, and so on. These groups were for example litter-picking groups and Freegle groups. Those respondents who were charities in some form mentioned the availability of funding, as well as supportive regulations – these groups were often charity or second-hand shops with a social or social and environmental cause.

4.1.6 Summary – activities and aims

In this section I have shown that the Community Waste Movement in the UK encompasses a wide range of activities, motivations and aims, that often diverge, but also converge. What they have in common is that they exist and operate outside the public and private sectors; that they work with (or against) waste in some capacity; that they work on the upper half of

the waste hierarchy and have the potential to facilitate the movement of waste and materials upwards; and that they are often motivated by both environmental and social goals. Table 4.2 creates a summarising portrait of activities, waste, organisational form, motivations, and waste hierarchy levels that these groups organise (through and on). These are largely based on the survey, but also incorporates those activities and types that were not captured by the survey, yet exist beyond.

Activity types*
Buying/selling
Gifting
Managing
Lending/borrowing
Campaigning
Picking
Teaching/learning
Repairing

Organisation
Informal
Community-based**
Charity
Social enterprise
Cooperative

Waste types*
Electric and electronic
Clothes
Furniture
Household items
Litter
Packaging
Garden waste
Wood waste

Motivation
Waste minimisation
Protecting the environment
Meaningful volunteer experiences
Supporting the vulnerable
Raising awareness around waste

Waste hierarchy
Prevention
Reduction
Reuse
Repair
Recycling
Collection
Picking

Table 4.2. A summarising portrait of the CWM. * = gleaned and divided from CWP type list and pie chart on p. 121 and 122. ** = various community-based forms, e.g. community interest company, community benefit society, constituted community group etc.

The plurality of the stated and informal aims, as given by respondents, indicate that the implications of the presence of these projects and their activities go beyond pure waste tonnage – within this body of projects there is also a wide emphasis on changing views on waste, instigating change in waste handling, improving social conditions, working for social justice, empowering communities, and so on. This is reminiscent of what Kirwan et al. (2013) write about grassroots innovations (GIs):

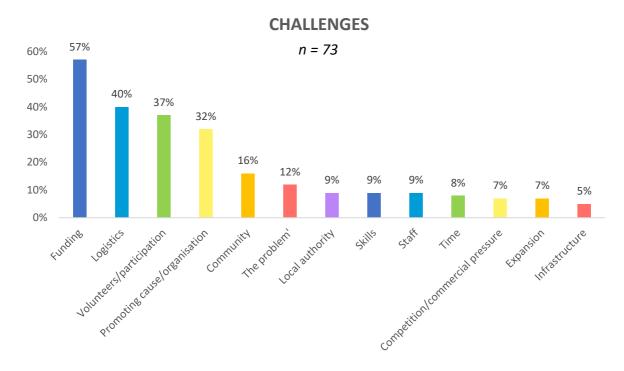
"[GIs] are driven by two key goals: firstly, to satisfy the needs of those people or communities who may in some way be disadvantaged by or excluded from the mainstream market economy, through helping to develop their capacities; and secondly, by an ideological commitment to develop alternatives to the mainstream hegemonic regime, which includes re-ordering the values and indicators of success for initiatives." (p. 831)

In this sense, CWPs can be argued to also be GIs. Many groups are simultaneously driven by an urge to meet practical needs, such as access to tools, clean beaches, or a place to get cheap, recycled wood, as well as a desire to instigate change – whether that change is local or national, personal or public, radical or incremental. Arguably, very little of what these groups do can be considered new – picking, lending, and reusing are hardly new practices; furniture, packaging, and garden waste are not novel waste types; organising informally, community-based, or cooperatively is not original; repairing, recycling, and cleaning are not pioneering activities. However, grassroots innovation does not need to be innovative in the strictest sense of the word – it can also be focused on *re*discovery or *new combinations* of activities, materials, and organisational formats. Without resorting to romanticising a bygone era where humans recycled everything and lived in harmonious communities with each other – such a narrative is sometimes espoused (O'Brien, 2008; Aiken et al., 2017) – what these groups do can be interpreted as cherry-picking the parts of the past that are compatible with a sustainable present and future.

Grassroots innovation is also a space for experimenting without profitability demands, without market pressure, and without having to be measured against mainstream innovation criteria (Seyfang & Smith, 2007). While this shows in the CWM, it is also nuanced by the challenges and difficulties faced by those who attempt alterity within mainstream settings. The next section will briefly look at some of the challenges that CWPs experience, as well as how they have attempted to overcome these.

4.2 Challenges

The previous sections characterised the CWM by its activities, types of waste, organisational forms, and aims and motivations. This section outlines some of the main challenges that these groups face, while also focusing on how these have been overcome.



4.2.1 Main challenges

Figure 4.6. Main challenges facing CWPs.

Respondents were asked to briefly describe up to five challenges facing them in their groups. As shown in Figure 4.6, almost 60 % mentioned *funding* as one of their main challenges. This was manifested mainly as too little funding available in general, but also as complicated funding applications, too high or complex demands, and siloed funding. An example of this reads:

"The constant push from funders for expansion, rather than funding to continue our fantastic work at the current level." (survey response – tool library)

The second most often mentioned challenge was *logistics* at 40 % – in this category, a few different types of answers have been compiled. Often these refer to unsuitable premises, e.g.

too expensive, too small, far away from other commerce; storage, for example not enough room for materials and equipment needed; or an inability to deal with the amount of things donated to reuse hubs/second hand shops:

"Managing increasing volumes of available resources being offered." (survey response – scrapstore)

The third most common challenge mentioned was *volunteers* or *participation*: volunteers being unreliable; unwilling to commit time; limited due to unpaid nature of work; volunteer numbers generally dropping, and so on. Other challenges mentioned were promotion and awareness raising; problems engaging or dealing with the community (e.g. gaining acceptance and/or involvement); attitude/relationship of Local Authorities; lack of skills in staff, volunteers and/or organisers; time (too little of it, often on behalf of organisers, which ties in with nature of volunteer work); competition or pressure from commercial entities; and how to expand sustainably, or how to avoid expansion (how to find a sustainable equilibrium). Several respondents also saw 'the problem' as one of their challenges, i.e. litter, landfill, climate change, waste, consumerism, throwaway culture etc., as well as the layout or lack of infrastructure, such as availability or design of bins.

Seyfang and Smith (2007) identify two types of challenges facing those that can be considered as, or practicing, grassroots innovation: intrinsic and diffusion/external. Diffusion is here interpreted as being broader than the strictest definition of the word, and instead signifying any challenge that is external to the group itself. Table 4.3 below divides the survey responses accordingly.

135

Intrinsic	Diffusion/external
Reliability of volunteers	Availability of funding
Skills of volunteers and staff	Logistics – availability of facilities
Reliability of staff	Lack of volunteers
Time available to organisers	Difficulty reaching people
Ability to promote group	Community is not interested/accepting
Difficulty expanding due to time	'The problem' – litter, too much things,
demand	low quality things, etc.
	Hostile or unhelpful Local Authority
	Competition with for-profit firms
	No space or funding for expansion
	Lack of infrastructure

Table 4.3. Intrinsic and diffusion/external challenges.

As this table shows, there are seemingly more external than internal challenges facing these groups. However, some of the challenges can be considered both intrinsic and relating to diffusion/an external barrier, e.g. volunteers and promotion – the reliability of volunteers is for instance an internal challenge, whereas the lack of people being interested in volunteering can be interpreted as external. Taken together, Figure 4.6 and Table 4.3 indicate that external pressures are experienced more commonly than internal.

4.2.2 Overcoming challenges

As this research is interested not only in characterising and describing what is done in the CWM, respondents were also asked to think of how they have overcome challenges in the past. As the intention behind this question was to identify which avenues are possible for community groups to take in order to solve specific problems, answers that were general or did not list the method of overcoming have been omitted.

Table 4.4 below presents a summarised version of this dataset with examples of solutions – these were divided based on characteristics of the solution itself. Most solutions were characterised by the same theme as the problem, e.g. solutions that answered to external challenges were often external in character. There was a relatively even distribution among types of solutions. Some were community-oriented, meaning that they relied on rallying the community, getting the community's support, or finding strength in numbers.

Solutions that were externally oriented stemmed from various challenges, but solutions were often to get help from a council or from larger organisations. One particularly outstanding type of solution was the organisation-oriented: here, groups had to respond to a challenge by rearranging the way they worked, by implementing plans and strategies, and by using clearly defined frameworks and structures.

Challenge – examples	Method of overcoming
Solutions are community-oriented	
Move to new site with commercial rent	New memberships, professionals volunteering their
	time, many regular and one-off volunteers for the
	move
Residents complaining about group	Working with schools gathered moral support,
efforts	complainers stopped
Running low on stock (for specific family	Appearing on local news led to being flooded with
in need)	donations from local area
Solutions are externally oriented	·
Council apathy	Getting larger organisation to participate who lobbied
	council
Keeping up groups' motivation and	Providing opportunities for groups to connect and
resilience	support each other, by sharing ideas, resources and
	skills
Cooperative governance issues	Advice from Coop UK/Hive
Solutions are funding-oriented	
Relentless need to fundraise	Running a large capital fund raising campaign to
	purchase own building
Digital platform limiting possibilities	Raising money and recruited volunteers with skills to
	create suitable platform
Solutions came about through one or tw	o individuals
Many (nameless) challenges	Tenacity
Facing closure	Two members of staff applying for charity status
Funding	Staff have voluntarily cut paid working hours to save
	expenditure, but work the same hours
Solutions are organisation-oriented	I
Realising community-raised ideas	Implementing a long-term plan with achievable goals.
	Dividing tasks according to interest and skills.
Mismanagement of staff and financial	Long-term working business plan
procedures	
High workload	Restructuring working group meetings to share equal
	responsibility
Respond to member demands about	Creating a constitution to clearly present aims and
working for the community	vision for supporters. Clarifying that organisation is for
	community and not targeting businesses.

Table 4.4. Overcoming challenges – grouped according to characteristics of solutions.

4.2.3 Summary – challenges

The challenges identified by survey respondents are echoed in most research on communitybased waste approaches (Luckin & Sharp, 2004; Dururu et al., 2015). While the challenges themselves have been identified in these sections, most of the underlying causes have not. These were not inquired about in the survey, and are likely largely structural in character. Previous work on community-based approaches have identified a number of reasons why projects and groups face these challenges. These largely coalesce around the invisibility of the many benefits that these groups have, for instance because of the informality, the immeasurability, and the lack of recognition of these groups' activities and successes. For example, the intangible and unquantifiable positives that CWPs create are not taken into account in formal contracting, budgeting, and evaluation activities in public waste departments (Alexander & Smaje, 2007; Curran & Williams, 2009). Furthermore, these benefits, whether they are quantifiable or not, are rarely reported or made public by the projects themselves, thus rendering these innumerable benefits invisible (Williams et al., 2012). Curran and Williams (2009) even claim that if LAs would work more closely with CWPs, reuse rates for bulky items could be increased by as much as 40 %. As such, Local Authorities, and society in general, could benefit from more generally recognising the impacts that CWPs have.

Another challenge that figures in most community-based projects is funding, which is identified by previous research (e.g. Sharp & Luckin, 2006; Dururu et al., 2015; Davies, 2007). While perhaps seemingly straightforward, this is a complex field that ties in with societal forces and factors, such as austerity and even capitalism or neoliberalism. Challenges related to funding are often to do with the unavailability of it, but also the fact that funding schemes are rarely stable, in the sense that they appear, disappear, and constantly shift. Demands of funding bodies are also constantly increasing, with grants given on the conditions that the receiving group meets the objectives of the funder, rather than their own. The lack of funding in times of austerity is further problematic, as some of these groups perform vital societal services, such as supporting vulnerable people, and have proven to be essential service providers where government are or cannot be (CIWM, 2016).

The way that groups attempt to overcome the challenges they face serves to highlight the resilience and reserve of action, energy and flexibility that reside within this movement. Naturally, some challenges are difficult to overcome this way, such as many issues related to funding. In light of this, some argue that projects should further formalise and marketise, in order to secure steady income streams (CIWM, 2016). While based on good intentions, advice like these are also based on assumptions that the stability of formality trumps the flexibility of informality, and are further blind to the highly politicised nature of what they suggest. Arguably, these groups perform important services to society, for which they simultaneously must shoulder the burden of how to continue providing said services.

These services are, as has been shown, multifaceted – ranging from clean streets to diverting compostables from landfill. However, only the *aims* of this movement have so far been covered, not the real-world achievements and impacts. The two coming sections serve to end this chapter on positive notes, by turning their gaze to possibilities for the future.

4.3 Realising potential – successes and achievements

The Community Waste Movement has now been characterised by what it set out to do, which types of activities and services it provides, which wastes it deals with, how it is organised, and also which challenges are faced by those who attempt to engage with waste outside of market and state. This section is the first of two that will explore the possibility and potential that reside here. It will cover what CWPs in this survey have achieved, as well as their impacts and influences on the general area and relevant Local Authorities. These are seen as initial indicators for the impact that these groups and projects have.

4.3.1 Experience of achieving aims

Building on the question of what kind of aims groups operate according to, respondents were asked to give an indication between 1-5, where 5 was highest, to the question "To what extent does your group feel that you are achieving your aims?". Figure 4.7 shows that the majority of respondents feel that they are partially or completely achieving their aims. This does not have to mean that they have already achieved all of what they set out to do, but rather that they *feel* that they are on the right track. 21 % chose '3', which arguably equals a medium level, at which it can be assumed that these respondents feel that they are in the process of achieving some of their aims, but maybe face difficulties for other objectives. A small number indicated a low number (2 or 1), signifying difficulties in their work to reach their aims.

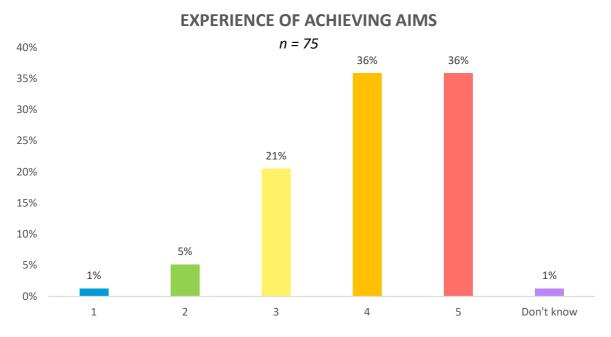


Figure 4.7. Bar chart showing to what extent survey respondents feel that they are achieving their aims. 1 means not at all, 5 means completely.

4.3.2 Measures of impact and success

One question asked in the survey queried for any *measures of impact or success*, to which 63 respondents gave some kind of answer. This is shown in Table 4.5 below, but two points must be raised. The first point is that 13 respondents misinterpreted the question to simply ask *if* they measured any impact, not if they could provide any numbers. The second point is that, as these groups are diverse, the answers are diverse – some of them are 'kg of waste diverted from landfill', 'tonnes of goods kept in circulation', 'number of bags picked', 'number of volunteers on each litter-pick' and so on. While these figures are not representative or comparable, they do indicate that the groups do have impact, even if this is sometimes difficult to quantitatively measure. I have attempted to do all the numbers reported justice in the table below.

Impact/success	Total amount, per year	From number of respondents
Waste saved, tonnes	2 895 tonnes	13
Waste saved, 'bags'	2 800 'bags'	2
Waste saved, items	4410 items	8
Litter picked, 'bags'	8524 'bags'	4
CO2 saved	2 272 tonnes CO2	2
Volunteer opportunities	1031 opportunities	7
People reached	321 309 people	19
People reached, minus scrapstores*	91 309 people	16

Table 4.5. Quantitative measures of impacts and success, as reported in the survey. * = scrapstores operate on a membership basis, where for example a school with 500 students is a member, and the students count as beneficiaries or 'people reached'. Some scrapstores can have 100 000 beneficiaries or more.

These numbers indicate four things: (1) that many of the things that these groups do cannot be measured accurately; (2) that these groups do not have access to precise measurement tools, such as scales; (3) that this movement is both homogenous and heterogenous, and while certain quantifiable dimensions are relevant for many groups, many others are not; and (4) that there is a lack of agreed-upon and unified measuring approaches and definitions, in the sense that 'waste saved' opens up for questions on what waste is, as well as what it is saved from. As was indicated in Chapter 2, waste is a fluid object, which often escapes precise definition, and while this research engages with waste as such, attempting to establish hard boundaries around it is outside of the scope here.

Previous research has identified the difficulty in measuring impact from communitybased activity as a challenge facing these groups (Williams et al., 2012). However, following Aiken et al. (2017), an emphasis on the quantifiable is indicative of the neoliberal context that community initiatives find themselves in. As such, while the measurements that are available can serve to imply that groups in the CWM do have measurable impacts, the suggested solution here must not be an effort to further quantify, but rather accept that not everything that is impactful can be represented as a number.

4.3.4 Immeasurable achievements

Building on the assumption, and following previous research on, that these groups have multiple intangible and immeasurable benefits, as well as create positive outcomes beyond their stated aims, the question "Does your group feel that you have had any other successes, beyond your aim/s?" was asked. Around two thirds of survey respondents answered this question, which was thematically analysed.

A variety of themes were identified, relating to social successes, environmental benefits, spreading inspiration, and so on. Social benefits were mentioned more frequently, likely to do with many groups having mainly environmental aims, but through their work, they also saw successes developing from simply working together with others. Environmental successes were mentioned fewer times, which can be interpreted as a result of these being mostly dealt with in these groups' stated aims and what they actually set out to achieve, as well as potentially being difficult and inaccessible to measure. Examples of these themes are presented in a table format below (Table 4.6).

Theme	Explanation	Example
Making friends	Some respondents mentioned that volunteers and organisers had become friends, and had created bonds and provided support for each other	<i>"We've helped to create [] a wonderful network of like-minded people who support each other."</i> (survey response – litter-picking group)
Community benefits	Many respondents stated that their work had created stronger communities, fostered community spirit, and brought people together	<i>"There is an improved community spirit and sense of personal agency."</i> (survey response – reuse hub)
Benefits for disadvantaged	 Many respondents mentioned that they had been able to provide support, volunteer opportunities, and other benefits for disadvantaged people. Their work had also had a positive impact on social cohesion, in reducing isolation and combating mental health issues 	"People make an effort to come out of the house to come and chat with someone, and they don't feel lonely." (survey response – repair café)
Job/volunteer opportunities	Some respondents said that successes they had had also involved creating employment and volunteering opportunities	<i>"We have employed more people, a total of 11 staff members."</i> (survey response – wood recycling project)

Positivity	Some respondents also said that they	"Members often say that the
	had been able to create positivity	kindness of strangers in donating
	through their work: either for the group	items has a huge positive effect on
	itself or for others who could also enjoy	their outlook." (survey response –
	the result of their work	Freegle)
Raising	Many respondents stated that they had	"Raising awareness of throwaway
awareness	created awareness and discussion	culture." (survey response – repair
	around their and related topics	café)
Spreading	Some respondents said that what they	"We have made new friends and an
inspiration	were doing had inspired others to do	allotment project has now popped
	the same or to set up similar projects	up as a result of this." (survey
		response – litter-picking group)
Engagement with	Some respondents said that they had	"We were part of the momentum
LAs and larger	successfully engaged with their local	that forced [district council] to use
organisations	councils – either positively or in a more	its enforcement powers (fly
	campaigning capacity, with positive	<i>tipping)."</i> (survey response – litter-
	outcomes	picking group)
Other	Other successes that were mentioned	
	were e.g. developing a good model for	
	collective work, reaching many more	
	people by engaging on social media,	
	putting up events, being involved in	
	disaster response, and economic	
	benefit for the community, etc.	

Table 4.6. Successes beyond aims – themes are presented along with a description and example responses.

As is clear from this table, achievements and successes range far beyond immediate effects on waste tonnage – these are all aspects that can contribute to a happier, healthier, fairer and more sustainable society, but of which very few can be measured. For example, community, friendship, positivity, and social benefits are all immeasurable, but are arguably important aspects in people's lives. Recalling previous research on GI and CBAW (e.g. Smith et al., 2014; Curran & Williams, 2009), demands and expectations of measuring and quantifying benefits and outcomes tend to lead to underestimating the role of these groups and this movement. Accepting that the aggregated benefits of the presence and existence of this movement likely outweigh their direct impact on waste tonnage might lead to more accurate expectations, as well as recognition, for all that these groups do and provide.

4.3.5 Influencing others – people and the public

To further tease out the possible impacts that these groups have, respondents were asked to describe if they, to their knowledge, had had any influence on the area they operate in, beyond their aims. Around two thirds of respondents said that they had experienced a positive impact that stretched beyond what they had set out to do. Table 4.7 presents the most common types of influences, along with examples from the survey.

Theme	Explanation	Example
Extending kindness	Creating a friendlier neighbourhood, where people get to meet, make friends, helping each other, extending kindness and gratefulness	<i>"The act of reuse often extends a kindness to a stranger"</i> (survey response – Freegle group
Source of inspiration	Leading by example, showing that it's possible to make a difference	"We have shown that by getting up and doing something, people will take notice" (survey response – litter-picking group)
Helping and being helped by the community	Gaining acceptance from, being supported by, and supporting the local community	"The local community has embraced what we do and always rallies round when we are short of certain items" (survey response – redistribution initiative)
Setting up similar groups	Helping, and providing support and advice for others who have or want to set up similar projects or groups	"We have other groups that visit us and want to set up similar projects in their town" (survey response – reuse hub)
Helping excluded/ unemployed/ struggling people	Having an effect on marginalised or struggling people, helping them back into employment, having a positive effect on mental health, etc.	"[Some] have been honest about their mental health and have said how helping us has made a difference to them" (survey response – local campaign group)
Collaboration with other groups	Collaborating with similar groups or project, creating or becoming part of network of community groups and organisations	"We have influenced several local community projects by allowing the borrowing of items such as DIY, gardening equipment, and events equipment" (survey response – item-lending library)

Table 4.7. Examples of how CWPs (can) influence others.

4.3.6 Influencing others – Local Authorities

On the question "Has your group had any influence on Local authorities, beyond your aim/s?" most answers indicated a positive influence – 60 % of responses suggested that the group had had an influence on LAs and the way they operate. 22 % said that they had had no effect on councils; the rest were unsure. Table 4.8 shows the type of interaction, relationship, or influence respondents feel that they have with or on LAs.

Theme	Explanation	Example
Actively influencing	The groups have actively sought to change or encourage something that	"We petitioned for the Council to use enforcement powers (fly tipping)."
_	LAs do or don't do	(survey response – litter-picking group)
Showcasing/ proving	The groups have shown that they can and are willing to do something	<i>"We have proved we cannot be ignored and we are taking ownership."</i> (survey response – litter-picking group)
Collaborating	The groups work and collaborate on various issues and in various situations with LAs	"We work alongside LAs to contribute to their waste reuse targets." (survey response – regional/national network)
Helping/ participating	The group, or members of the group, are helping LAs, or participate in committee or strategy work	<i>"We are frequently asked to help write proposals for funding on appropriate projects."</i> (survey response – repair café)
LAs relying/ referring	LAs rely on groups for certain work/actions; LAs refer people to groups	<i>"Heavy reliance on volunteers to undertake cleaning activities across Wales."</i> (survey response – regional/national network)
Support	The groups feel supported by LAs, but not necessarily in any practical or financial way	<i>"Unfortunately not financially as local authorities are so strapped for cash, but they engage with us on other levels."</i> (survey response – scrapstore)
Difficulty engaging	The groups feel that it's difficult to engage with/influence local authorities	<i>"It's hard to get through to them."</i> (survey response – Freegle group)

Table 4.8. Examples of how groups in the CWM (can) influence Local Authorities.

Further to quantifiable and non-quantifiable impacts, the two tables 4.8 and 4.9 indicate that groups also influence 'others', which includes individuals, the public, other groups, businesses, schools, as well as Local Authorities. The type of influence that is reported ranges from spreading positivity to putting reuse on the agenda, from helping the community to

proving that formal and informal community groups contain and embody potential and possibility.

4.3.7 Summary – realising potential

In this section I have shown that the respondents to this survey have varying and diverse, measurable and immeasurable influences and impacts, both on waste and the environment, as well as the social conditions in their cities, towns, communities, neighbourhoods and/or areas. While these impacts are empirically contained to the respondents of the survey, the results do indicate that those groups and projects who can be placed in the community waste movement play an important role for various reasons. Beyond their immediate impacts and achievements, they also have an influence on their surroundings, including attitudes towards, and views of, waste and the environment, as well as how Local Authorities work. However, measuring the contributions of this movement is challenging. The informality among many of these groups means less capacity to weigh and count materials and items, which can incorrectly be interpreted as no impact, rather than immeasurable impact. As stated, the solutions to this should not be to *only* increase counting and weighing, but also to recognise that there are many immeasurable outcomes and impacts of what these groups do.

This section has also showed that this movement does not only contain potential, this potential is also realised – by diverting waste from landfill, by picking litter where LAs cannot, by bringing people together through sharing. However, the question remains if there are other ways of understanding and uncovering possibilities and potential, especially those that are not realised or those that cannot be realised within the incumbent system. The next section attempts to advance this inquiry.

4.4 Performing possibility – providing and resisting

As this chapter has shown, the CWM incorporates a wide variety of groups and projects, that still exhibit many similarities in terms of motivations, challenges, and successes. The previous section utilised survey data to highlight that CWPs contribute both to waste minimisation as well as countless, immeasurable benefits for society as well as the environment. This section will build on this, but go beyond, in an effort to begin discerning a different kind of potential: one which could pave a way for post-capitalist waste organisation. The groups, projects, and initiatives that fall under the umbrella of the CWM can be argued to perform vital services to society. While some respondents to the survey questioned whether they really should have to carry this responsibility, the fact remains that there is a need for these services – a need that the state is currently not meeting. Table 4.9 below summarises these services from survey data, divided between 'hard' and 'soft' services. It should be noted that *service* is utilised in the sense that it is an act that is performed for the benefit of society, not in the capitalist sense of the word.

'Hard' services	'Soft' services
Cleaning streets	Supporting and protecting vulnerable people
Cleaning natural areas	Building community
Waste minimisation	Promoting friendship creation
Mitigating environmental issues	Spreading positivity
Cheap or free access to things	Bridging segregation
Recycling	Opportunities for creativity
Recycling and waste collection	Teaching skills
Repair	Opportunities for meaningful activity
Employment	

Table 4.9. Summarising the services that the CWM provides.

As has been shown in this chapter, and as is evident from Table 4.9, the CWM as a whole provides these so-called 'hard' and 'soft' services. Some of these services are ones that the state is expected to provide, whereas others are left to individuals and communities to take care of themselves. *Simultaneous* to this service provision, many groups that provide some or all of these services also *resist* an unsustainable or unjust status quo in a variety of ways – whether that is insufficient understanding of, and action on, fly-tipping, lacking support for the homeless, or rampant consumerism. The ways these groups resist have been identified, in this survey, as including lobbying politicians and Local Authorities on local issues; campaigning for change in communities, LA level, or nationally; raising awareness of local, national, and global issues, such as littering or landfilling; and proving that different ways of doing things are possible. The quotes below showcase this resistance:

"We have proved we cannot be ignored and we are taking ownership." (survey response – litter-picking group)

"[We want to raise] awareness of the issues associated with climate change, scarcity of resources and economic sustainability." (survey response – local campaigning group)

"Our policy work has led to voluntary changes." (survey response – regional/national network)

"[We try to] influence lawmakers towards repair and reuse." (survey response – repair hub)

While this is only a fraction of what all CWPs in the UK do, it serves to highlight some of the possibility that resides within the movement. These groups do not perform dissenting activism – which is still an important aspect of a democratic society – but they promote, encourage, and campaign for a different, and further-reaching, way of organising waste, while simultaneously providing the services that they see as lacking in society.

Jorgensen et al. (2021) claim that beach clean-ups are performatively normative (Butler, 2010), because they "reflect participants' hopes for how their community – and the biosphere – should be" (Jorgensen et al., 2021, p. 156). This holds true also for other community-based waste initiatives – the aims and motivations of the survey respondents indicate that they want to see a different way of organising waste, or one that takes many steps further than current legislation and policy demand. This means that facilitating furniture reuse, providing employment for the disadvantaged, and fostering community spirit could all be argued to be moments of performing a more desirable society, of bringing a fairer and more sustainable way of organising into being. Thus, these groups not only contain possibility and potential for a better future, they also perform versions of that future in the now.

By paying attention not only to what CWPs do, but also to what they resist, I have shown that there is possibility in the CWM that goes beyond that which is normally measured and considered for potential. Here, the first steps have been taken to begin the investigation into whether or not community-based approaches embody potential for a different kind of waste organisation. While the community realm has been identified as the site where there is the most potential for non-capitalist organisation, all community initiatives do not automatically carry this potential. Most of them do, however, perform and attempt to bring into being a society, or a part of society, that is organised in a fairer and more sustainable way than it is now. By not only promoting, for example, the normalisation of reuse, but also providing the facilities for increased uptake of reuse, these initiatives provide, promote, as well as resist.

4.5 The Community Waste Movement then and now

In this chapter, the community waste movement has received renewed attention – it has been 15 years since the CWM received thorough consideration (Luckin & Sharp, 2003; 2004; 2005; Sharp & Luckin, 2006), with only a few works focusing on individual aspects of community-based waste approaches since (e.g. Dururu et al., 2015; Williams et al., 2012; Davies, 2007; 2008; Curran & Williams, 2009). In this past decade and a half, the community waste movement has changed some of its characteristics, yet has remained true to many of the original motivations: waste minimisation and social benefits. Four key differences and shifts can be discerned through comparing previous works on CWPs with what has been introduced in this chapter: CWPs no longer undertake recycling; electronics refurbishment has changed form; waste prevention through sharing is now more common; and litter-picking is here seen as an important part of the CWM.

The main point of difference is that recycling – collection, sorting, disassembling, and actual recycling (i.e. melting, pulping etc.) – is rarely undertaken by community organisations anymore. In 2003, more than 6 % of UK households were served by community recycling groups for kerbside collection (Luckin & Sharp, 2003). Such action today is rare; few of the survey respondents were undertaking any recycling activities (those who did, did so in conjunction with other activities – see next chapter on The Reuse Collective for example); and the umbrella organisation The Community Recycling Network, which gathered all of these organisations, no longer exists. The reason behind this shift is the change in waste policy at EU, national, and regional level, the increase in profitability of recycling and the expansion of recycling markets, and changes to waste collection contracting on the Local Authority level (CIWM, 2016; Interpol, 2020; Sharp & Luckin, 2006).

Another key shift is the activities targeting electronics and electrical equipment. Electronics refurbishment was reported as a common activity amongst community waste

149

projects in 2003, e.g. through social enterprises that would accept donated WEEE and refurbish these to sell or donate (Luckin & Sharp, 2003). Today, this is a rarity in the community waste movement. This could be theorised to have similar reasons as changes in recycling activities in general, with the addition that the electronics sector and market have undergone massive changes in recent years. Sharp and Luckin (2006) furthermore predicted this 15 years ago:

"[L]egislative changes mean that waste handling is becoming more closely regulated, and thus it is becoming more difficult for small community operators to function. For example, in the field of waste electronic goods, the WEEE directive is likely to lead to a growth in retailer take-back schemes [and] increased involvement of commercial operators." (p. 14)

As identified in Chapter 2, electronic and electrical waste is furthermore now the object of much export to the Global South (BAN, 2018). However, as this survey indicates, where the CWM in 2003 engaged with electronics refurbishment, community waste projects today instead focus on promoting, organising, and teaching *repair*. This comes in the form of workshops, either through stand-alone, continuous events, e.g. Repair Cafés, or as side activities of larger organisations, such as The Stuffotheque and The Reuse Collective (introduced in Chapter 5).

Item-lending libraries are increasingly seen as a key component of the sharing economy and as a method to prevent or reduce waste arisings (Baden et al., 2020). Since ILLs are a relatively new phenomenon, they have not received any attention in previous works on community waste. Due to their waste prevention potential and anchoring in community, the choice to include these in the CWM was seen as an important and logical expansion. While ILLs are still a growing phenomenon, with only roughly 30 currently existing in the UK, and while they only accounted for 9 % of survey respondents here, they pose an interesting suggestion for a solution for more sustainable and collaborative consumption. As such, I view their inclusion in the CWM as a logical step in the study of community-based waste approaches.

Another crucial movement in community waste studies is the suggested inclusion of litter-picking groups. Previous works have studied LPGs in isolation (e.g. Jorgensen et al.,

2021), and not as part of a larger body of similarly motivated community-based efforts. While litter-picking does not reduce waste arisings, these groups contribute to the minimisation of the negative environmental and social impacts associated with rogue materials, while simultaneously providing moments for participation in community, collective efforts, or environmental action. Earlier work on community waste (e.g. Luckin & Sharp, 2004) focused on organisations that minimise, reuse, or recycle waste, whereas my definition rather focused on *dealing* with waste or waste prevention. Furthermore, social media as well as the *Attenborough effect*, a term coined after the BBC series *Blue Planet* was released in 2019 where one episode focused on the impacts of marine litter (McCarthy & Sánchez, 2019), has put the negative impacts of litter and waste, as well as the potentially positive impacts of picking it, on the agenda. As such, adding them to the CWM, like for ILLs, appears as a logical move.

The changes that have come about in how community waste can be, and is, studied, are results both of real-world shifts, as well as intentional conceptual broadenings of how community waste can be understood. Much remains in place: a willingness to act on perceived unsustainabilities and injustices, be they local or global, as well as the format for this action, i.e. non-profit and non-state. Groups in the CWM, both then and now, often operate according to multiple goals, often both social and environmental. Then as well as now, they provide both measurable and immeasurable impacts, both for waste as well as social objectives. However, this research reflects how, following changing times and possibilities, certain activities (e.g. recycling) have declined, while others (e.g. borrowing) have joined and grown. As such, while seemingly peripheral, the CWM continues to deliver and create important services and impacts for society.

4.6 Summary – characteristics and possibilities of the CWM

This chapter set out to answer RQ1:

RQ1: What are the characteristics and possibilities of the UK Community Waste Movement?

I have shown that the CWM is characterised by a wide variety of activities, waste types, and organisational forms, ranging from litter-picking to tool libraries, that keep waste out of urban and natural areas, as well as out of landfill and other industrial disassembling facilities. Some groups are informal, others are formalised as charities, community benefit societies, or social enterprises. Groups that fall within the Community Waste Movement are similar in that they:

- **Target waste** their actions move waste up the conventional as well as communitybased waste hierarchy.
- Are non-profit and non-state while their work might be backed or supported by these, the organisational power lies outside of market and state.
- **Perform vital services to society** some of these are environmental, some are social.
- Struggle with similar issues the underlying reasons largely revolve around their services and modes of organisation being non-profit or informal in a system that favours profit accumulation and formalisation.
- Have positive impacts beyond their aims these are often centred on 'soft' impacts, e.g. community-building, breaking isolation and spreading positivity.
- Influence others around them including the public and LAs.
- **Perform possibility** they both promote a different way of doing things, as well as provide the possibility or facilities to do it.

Further to the final bullet point, these groups can also be viewed as grassroots innovation (Seyfang & Smith, 2007) – their work is often highly localised and contextualised; they operate according to other motives than profit, i.e. they do not seek out novel or different solutions because it might be profitable, but rather because it is needed; and they push for a new way of relating to waste, i.e. one where the potential of waste is recognised, not swept under the rug. While potential has been preliminarily identified in this chapter, this potential, its implications, will receive further attention in Chapters 5 and 6.

While this chapter has largely focused on the organisational side of community action on waste, one recurring theme has been that of what constitutes waste and how it is thought of. So far, the definitions and boundaries of waste have only been hinted at, e.g. when groups state that they recycle waste, when they in fact repair items, or when groups state that they do not engage with waste, because they reuse items, which are not viewed as waste, because they are reusable. The complexities of waste, its definitions, boundaries, categories as well as what it does to us were not covered in the survey, but rather emerged as a point of interest. What also emerged was that even if most waste can theoretically be weighed and counted, not all benefits and impacts that come out of waste action can be measured. This indicates that there is much to say about the sociomateriality of waste issues and solutions.

Returning to the potential identified in Sections 4.3 and 4.4 – it should be reiterated that the possibilities that reside within this movement appear on different levels of radicality, as well as different levels of realisation. Much potential is already being realised, most of it arguably incremental in terms of transformation to a fairer and more sustainable society; some of it, however, is more radical in nature. The same goes for view of, and relation to, waste. Chapters 5 and 6 will pick up on this, and each deal with the implications of community waste action for post-capitalist possibility.

This chapter has given a broad overview of the Community Waste Movement. The next chapter will present the three community waste projects that were briefly introduced in Chapter 3. Specifically, this will be a deep dive into the specificities, contexts, and nuances of organising community-based waste initiatives. Furthermore, their relations to, and views of, waste will be interrogated, following the framework that was introduced in Section 2.4. The extent to which, and how, these cases then practice commoning will receive attention in Chapter 6.

Chapter 5: Three cases of picking litter, reusing material, borrowing things

This chapter will continue the examination of community waste projects in the UK, and will do so by introducing the three case studies that laid the majority of the empirical foundation for this thesis. Chapter 4 introduced the Community Waste Movement by focusing on its composition, challenges, achievements, and potential, utilising survey data. While much of the survey data was text-based, this did not yield an in-depth understanding of the experiences of organising waste action outside market and state. Three cases were sampled from the survey – one litter-picking group, one reuse hub, and one item-lending library. These were introduced in brief in Section 3.3.1, but will now receive further attention. This chapter will, as such, add additional details to RQ1, specifically surrounding the intricacies of organising community action on waste, as well as address RQ2:

RQ2: What is the role of, and perspectives on, waste in Community Waste Projects, and what are the implications for post-capitalism?

This chapter is divided based on case. Each case will first be introduced and described, to add detail and richness to our understanding of community-based approaches to waste in general, and the three cases under study in particular. Specifically, the cases will be introduced through attention to context, history, services and activities, and vision and outlook. These four facets are used to highlight context-specificity, to give an overview of what initiatives have struggled with in the past, what has shaped them, what they undertake and provide, and to give an indication of how they might develop in the future. The cases will then be examined in terms of how waste figures and is viewed within the initiative, specifically looking at composition, position, and representation. These were chosen to be able to engage with waste from multiple angles, to tease out role and perspective. The theoretical framework for this was presented in Section 2.4. This chapter will end with a discussion on the implications of examining the sociomateriality of waste in community action.

5.1 Glanhewch Taifon

Glanhewch Taifon (GT) is a small community group in the area Taifon in the Welsh city of Casdwr. GT consists of five active core members and around 40 regular and fleeting volunteers. The group comes together once a month to pick litter in a different subsection of the Taifon area each time. On every litter-pick, they receive help from an enforcement officer from the city's waste team. He collects the litter that is picked in residual and recycling bags, deals with and takes note of bulky items, such as sofas and fridges, and deals with hazardous waste, such as needles and drugs. The group meets regardless of weather, picks around 30-40 bags of rubbish each time, and provides people with an opportunity to get to know their neighbours.

Littering and fly-tipping are often understood as behaviours, which certain individuals take part in, for their selfish gain, because they don't know any better, or because they simply do not care about the environment or others (Willis, Maureaud, Wilcox and Hardesty, 2018; Murphy, 2012). The oft-turned-to solutions involve information campaigns, 'shaming'

campaigns (e.g. the Dirty Pig campaign (KBT, n.d.), and enforcement. The case of Glanhewch Taifon tells a different story of a complex problem and a community-driven solution.

5.1.1 Context – a littered area

Litter-picking in Taifon is framed mainly by the presence of litter. This is attributed to five factors: historical as well as current waste management practices, the infrastructure of the area, a lack of community pride, and a council suffering from austerity. These will be expanded upon below.



Figure 5.1. Back alleys in Taifon.

Taifon used to have a bi-monthly bulky waste service, where skips were positioned in the dead ends of streets around the area. In these dead ends, there is often a tree. When the skip scheme was running, residents could discard their unwanted things in these skips. A couple of decades or so ago, this service was discontinued and residents were encouraged to recycle through the kerbside recycling service, and bring the rest to central recycling facilities.

The practice of bringing waste 'to the tree' still remains, however. Some residents incorporate fly-tipping into their waste routine, likely without understanding the illegality of it. Sometimes bags of household waste are found at these trees, sometimes larger items, such as old furniture or broken electrical appliances. Once these have been left there, it does not take long for someone to report it to the council's waste team. The waste team then collects it, and the waste is gone. This is how the fly-tipping is dealt with, but for the fly-tipper, this is how waste disappears. The disappearance perpetuates the understanding that waste is legitimately brought 'to the tree', and then taken care of. One resident and litter-picker said:

"[My neighbour] knocked on my door late one evening, and [...] then she said to me 'will you take that bag?', there was a bag in her front garden, it was a green bag, but it was full garden waste. She said 'will you take it down to the tree for me?', and I said 'no, I can't do that, I'm sorry' and I explained why, [but] I don't think she quite understands, I don't mean doesn't understand the language, I mean doesn't understand why." (Rose, GT)

Except road ends, Taifon also has many back alleys, which are often littered (shown in Figure 5.1 on the previous page). Another feature, which is appreciated by residents, is its many small parks with accompanying playgrounds and sportsgrounds. These are used vigorously by families and youths playing football, basketball, and other sports. On one walking interview, one respondent explained:

"So this park is always full. [...] And then there's this play area here, and then there's the games area over there, that's always full, and you can see how much litter there is, and they usually playing the game... with all of the litter that they probably dropped. So that's a nut we haven't cracked yet..." (Rose, GT) One challenge, which will be explored more in Chapter 6, is the reported lack of community pride and spirit, which is theorised by respondents as leading to residents caring less about their surroundings and their neighbours:

"And around here, I notice there's loads of rubbish on the streets, and that kind of bugs me quite a bit. Just because you live in a, probably, less affluent area, doesn't mean you shouldn't love your community any less, and it's a bit of a shame that, I guess, people don't really take as much pride in the community around here as they should do." (Mal, GT)

Furthermore, the council of Casdwr has statutory responsibilities to keep streets clean, as do every city and county council in England and Wales (CPRE, 2020). While Taifon has a city council waste team especially dedicated to the area, some respondents feel that the council does not do enough. There is a frustration over council inefficiency, but also an understanding of financial constraints:

"So, you know, we say 'well the council can't do everything' and you know, 'if everybody did a little bit, and then it won't be as much for the council to do', so and the council doesn't have as much resource now as they used to because obviously they're suffering from austerity, everything's been cut back, and street cleansing isn't really one of their top priorities now, there are bigger things like education and then social services. So it is difficult for the council." (Faye, GT)

These practices and factors – lingering fragments of historical waste management routines, current, self-perpetuating fly-tipping collections, particular infrastructure, a lack of sense of community, and a financially challenged council – are what frames littering and fly-tipping specifically for Taifon.

5.1.2 History of Glanhewch Taifon

Glanhewch Taifon was set up in 2018, and had been running regularly for two years at the start of the national lockdown in March 2020. The initiative for the group came mainly from two people, with three more joining at its inception. The reasons for setting up GT were outlined in the initial survey:

"We recognised that our area had a litter and fly-tipping problem and a lack of green space. We believe the area has a lot of potential to be a lot more attractive and we wanted to improve our area whilst enabling a sense of pride in the community and getting to know our neighbours." (survey response, GT)

However, picking litter was not the only objective, but rather a means to an end:

"Very very quickly, in the inception, first meeting, when the organisation was formalised, it was like yeah and we want to do more than, more than just litter-picking, you know. Litter-picking's the sort of way to get people in, you know, the trojan horse, the gateway to all good things." (Dennis, GT)

Litter-picking was seen as a small, positive, practical, easy-to-start, easy-to-rally-around activity, that could later lead onto other activities, involving greening, tackling air pollution and traffic, and organising e.g. repair cafés. There was an experienced need to kindle a sense of community, and a litter-picking group was seen as a good starting point.

To start up, the group had help from a larger litter organisation, which provided equipment, a structure, and advice on how to run the group. After this initial help, the larger organisation has withdrawn, as they usually do, and the group runs and organises itself. This was not only by chance, but also an intentional aim of the group:

"We are very small but wanted to be able to be quite independent from the local council and Glanhewch Cymru and to work and collaborate with other groups." (survey response, GT)

GT now has five core members, who plan and organise all activities. There are also several loyal volunteers, who come to almost every event. While counting volunteers is difficult due to variability in turnout, the group estimates that they have around 40 volunteers, which are variably involved, ranging from every month to a couple of times a year. Early on, the group managed to get support from the local waste team, by approaching an enforcement officer working in the area. The officer has since been to every litter-pick the group has organised.

After around a year, the group decided to become a constituted community group, as this enables groups to have insurance to work with volunteers, as well as open a bank account to receive donations or funding.

5.1.3 Activities – picking, greening, collaborating

The group's main activity is litter-picking. This is done once a month on Saturdays or Sundays. Equipment, such as picks, high-vis vests, and residual waste and recycling bags are provided by the city council. An area of Taifon is chosen in advance, and where to meet is disseminated on social media. After an initial introduction, people gear up and head out in small teams of two or three people onto adjacent streets, squares, and parks. Participants are encouraged to pick up as much as they can, but also to not spend too much time trying to get e.g. cigarette butts out of cracks in the pavement. When pickers come across something bulky, like a fridge, hazardous, like needles, or foul, such as dog poo or a dead animal, they report it to the enforcement officer, who then either collects it straight away, or makes a note and collects it the following week.

After two hours, people gather at the meet-up point with the collected rubbish, and receive compensation in the form of Casdwr notes, which is a local currency that is redeemable in museums, cinemas, leisure centres, and more. A picture is often taken to commemorate the achievement (such as Figure 5.2 overleaf).

Greening, such as planting and maintaining bulbs, flowers, and planters, is sometimes done in conjunction with the litter-picking. Making the area greener is hoped to improve to the way Taifon is experienced by inhabitants and visitors. Respondents report that the feeling that the area is scruffy, ugly, run down in places, contributes to people not feeling any pride or urge to care for the area. From another case, which is set in a national park, one respondent said: "They've got more to be proud of here, I mean you look at it, and it's beautiful, and I think because it's so beautiful, people care more, you know, whereas in Kercester I lived on a terraced estate, you know, there were no gardening, only pavement, and there was a bin yard, so people who haven't got that [points to the national park] to look at, are more inclined to just drop a cigarette in his own street, crisp packets, you know, things like that." (Adrian, TRC)



Figure 5.2. Photograph of litter-pickers and the spoils of the day.

Installing planters is hoped to curb the feeling that these places are derelict and that no one cares for them. However, at the moment many of the planters are sometimes used as bins, when there is no other bin close by.

GT works closely with Casdwr city council, its waste team, and specifically one enforcement officer. This relationship is mutually beneficial, as it allows the city to work closer to those whose needs it is trying to meet, and the group to voice their concerns. The officer in Taifon started working with GT voluntarily, outside of his working hours and without pay from the council. This was appreciated and respected by the core team and its volunteers and led to a valuable relationship early on. After having shown success, the city council agreed to pay the officer for supporting GT one weekend day a month.

GT also teams up with other groups across Casdwr, but mainly those that are close to its borders. This is acknowledged to be beneficial in a number of ways. First, it allows groups to exchange know-how and experiences with each other. Second, knowing that one is not alone is reported in the groups to be comforting. Third, teaming up with another group allows for more (wo)manpower and covering more surface area. Fourth, having a closer relationship to other groups means groups can help promote each other and make one another more visible on e.g. social media.

Social media, mainly Twitter, is a communication channel frequently used by GT. After each pick, a photo and accompanying text are posted, for the benefit of the community, other groups, and the city council. The Twitter account is also used to communicate with the city council about fly-tipping or hotspots in the area (shown in Figure 5.3). The account is used frequently, and is considered another direct and quick link to the city council. It also includes a public aspect, where transparency and accountability are forced on the council. The Twitter account further serves the purpose of connecting the group to other similar groups across

the UK. Litter-picking groups are especially active on social media, which can be attributed to a number of things, including the affective potential of waste where it should not be (Douglas, 1966; Hawkins, 2006), as well as the localism and decentralism of litterpicking.



Figure 5.3. Screenshot of Twitter post from GT.

5.1.4 Vision and outlook – doing yourself out of a job

The enforcement officer and multiple pickers report that there is less litter and less fly-tipping going on now than two years ago. If this is due to changes in how the waste team works and GT's actions is difficult to establish, but the group itself hopes that it is due to their presence and the way the council has stepped up its efforts to working more preventatively and systematically.

Glanhewch Taifon sees litter-picking as a means to an end, as a trojan horse for all good things, as a gateway to community. Their vision is to do themselves out of a job, create a greener, safer, and friendlier community, and get to know their neighbours in the process. Currently, GT, like many litter-picking groups, do what they do not want to have to do. One respondent from the WG said:

"We do get people saying 'you shouldn't be doing it, it's the council's job', yeah. In response to those is 'no one should be doing it', really, the best would be for there to be no litter in the first place, so they're the people that need to be spoken to, rather than us, trying to pick it up." (Don, GT)

This is something that is reported across respondents – some see it as purely the council's job to clean and maintain streets, and while it is indeed their statutory duty, pickers report a perception that the council is underfunded, having their budgets cut, and suffering from austerity. While GT wants to simply use litter-picking to get the community going, get it talking, get it activated, the litter will likely remain for the foreseeable future.

5.1.5 Materiality of waste – the role of litter

Glanhewch Taifon and its activities, history, and context have now been introduced in depth. These coming sections will interrogate the understandings of waste amongst participants in the group as well as investigate how waste acts on the group. The table that was presented in Section 2.4 suggested that waste can be looked at from three different angles – composition, position, and representation. Composition aims to understand the basics of the waste in question, position is meant to uncover if waste is viewed as fluid or fixed and where in the waste hierarchy it is placed, and representation asks if waste symbolises something and if it is constituent of anything. Table 5.1 introduces these three angles for GT.

Category and guiding questions	Glanhewch Taifon	
Composition		
What kind of waste/material is handled?	Illegally discarded materials and items	
How is the waste/material handled?	Picked by volunteers using picks; hazardous waste	
	picked by the council; taken to waste facility by	
	council	
Who is viewed as responsible for the	Council has statutory duty, but everyone is seen as	
waste/material?	responsible; responsibility not always important	
Position		
Where in the waste hierarchy does the	Litter is waste; divided into recyclable and refuse	
waste/material fit?		
Which position(s) of the waste/material	Prevention is important; litter is a threat	
are emphasised?		
Representation		
Which role(s) does the waste/material	Litter brings people together; it activates the	
have in the initiative/project/group?	community	
Does the waste/material spark emotion?	Yes	
If yes, which emotion? (How) is this	Litter is upsetting and disgusting; picking it feels good	
emotion resolved?		
Is waste viewed as symbolic or	Litter symbolises people not taking pride in their area	
representative for something?		

Table 5.1. Composition, position, and representation of waste in GT.

What emerges from Table 5.1 is that litter is simultaneously positive and negative: it threatens community, yet it instigates action. Litter is seen as a hazard, but one that GT pickers choose to engage with. The following sections further examine the relationship between GT and the waste they touch, specifically how picking litter is an innovative act, yet expresses similar waste perspectives to capitalist waste narratives; how litter sparks emotion; and how it can create community.

5.1.5.1 Out of sight, out of mind?

Glanhewch Taifon deals with many kinds of wastes once they have been illegally discarded. The waste includes packaging material from food, plastic and glass bottles, metal cans, plastic bags, toys, broken electronics, furniture, needles, dog poo bags, and so on. GT picks up everything that is not bulky or hazardous – the enforcement officer that GT collaborates with deals with e.g. furniture and needles. The litter is further approached with caution – items are rarely picked up by hand. Once picked, the waste is brought to a recycling or incineration plant. As GT does not do anything more with the litter than this, they do not attempt to engage with the actual waste in an alternative way. This largely aligns with the capitalist perspective *waste as hazard* (it is where it should not be and there it poses a threat) (Lane, 2011). Particularly when waste is understood as a *hazard*, solutions to it revolve around containing (Gregson & Crang, 2010), preferably so that it cannot be seen, essentially embodying *out of sight, out of mind* (here abbreviated OSOMism). The way that litter is understood and dealt with in GT can thus be interpreted as a kind of OSOMism, because as long as the waste is where it should be – in bins and on trucks, waiting or on their way to be recycled or incinerated – it does not pose a problem anymore.

While unpaid citizens picking litter can be seen as innovative, alternative, and something that contains potential, the options that exist for the waste itself is landfilling, incineration, and recycling, i.e. it is put back into an industrial system. What should be noted is that GT does not pick litter to experiment with, discover, or promote an entirely new way of dealing with waste – they pick because they feel urged to do something about the state of Taifon's streets and parks. There is also recognition by some respondents that the waste should not be created in the first place:

"Yes, so in Casdwr, there are ten Local Authorities around Casdwr and all their rubbish goes to our incinerator which produces energy, energy recovery facility, so nothing actually goes to landfill anymore, but goes there, and we think it shouldn't be created in the first place probably." (Rose, GT)

Although the litter that is picked ultimately finds its way back into an industrial system, the kind of OSOMism present in GT does arguably not lead to the same waste management *choices* as it does in the public or private sector. Here, residents meet up *voluntarily* and touch other people's discards. While the litter is viewed with disdain, it furthermore does not lead GT members to close their eyes – it is also seen as a potential starting point for something positive.

5.1.6.2 Correcting litter, correcting community

Perhaps one of the most glaring effects of litter is its ability to spark emotions. These emotions range from mild disgust to rage. Echoing Hawkins (2006), *seeing waste* signals a societal – or community – failure, and this failure is bound to reverberate with negative emotions. Respondents report that when they come across or see these illegally discarded materials, they feel angry, irritated, depressed, upset:

"I think, anger [is the emotion], really. It was spoiling my view, [...] it does, it draws your eye. [...] I look out over [the area], and on the bank, you can see a traffic cone, which is bright orange, and it's, you know, bright yellow something or other, that just winds me up, that sort of stuff, so let's just do something about it." (Don, GT)

The reason for being angry with litter is often left unspoken, and when prodded for, responses are not clear-cut. Returning to Hawkins' (2006) suggestion that waste represents failure – the civilised and respectful society does not let its waste show and spill over. Waste further represents the broken and unclean (Kristeva, 1982), which are negative states for one's community and neighbourhood to be in. Litter is by default *bad*. One respondent ponders:

"I don't know, it's something, I was brought up to not drop litter, you know, from a young age, trying to keep where you live as nice as possible, in terms of the environment and everything, and well, you know it's like having lots of litter in your house, you wouldn't want it, and I don't really want to see it when I walk around either." (Mal, GT)

Litter and litter-picking are two examples of sociospatial ordering, being on two opposing sides: the litter orders the community into what it is (not cared for), and picking it is a counteract at *re*ordering the social space (caring for it). For instance, many respondents that talk about how seeing litter makes them upset, also report feeling a sense of satisfaction, or being cheered up, by subsequently picking the litter they have seen, either on their own or in the group: "And the very last litter-pick I came to, and the walk to the litter-pick I found really depressing, I was feeling a bit low, I was walking up the main drag, walking up Main street, and it was just rubbish blowing about everywhere, I felt really really low. Two hours of litter-picking later, I was like 'yeah I feel great now'." (Dennis, GT)

Following Douglas (1966), waste and litter can be interpreted as *matter out of place*. The act that follows from being upset at litter as matter *out of* place is putting it *into* place again (Hetherington, 2004). While stemming from a negative emotion, ordering the space that is littered is a positive act – it turns a neglected community into a well-cared for community. The picking, while targeting something negative, becomes a positive performance of community and the social (Hawkins, 2006), meaning the correction of litter is what constitutes not only the performance of a waste practice, but also *community itself*.

Simultaneously, there is a widespread awareness in GT that the litter itself gives rise to the moments for meeting neighbours and for starting building up a small sense of community:

"Litter-picking's the sort of way to get people in, you know, the trojan horse, the gateway to all good things." (Dennis, GT)

However, while litter does spark emotion and community action in Taifon, these responses to an imminent threat remain, by necessity, pragmatic and fragmented. The litter is there, as a threat not only to community, but also to natural environments and its inhabitants, and it needs handling. This handling is a mix of alternative waste action and mainstream waste management – the litter is picked by a community, but there is no other option than putting back into the industrial complex from whence it came. Even so, the waste is perhaps seen and partially treated as a hazard – a threat to community – but, again, it does not lead to inaction and acts of ignoring; it also does not *solely* lead to standard, mainstream responses of industrial cleanliness and hiding. Rather, it fuels action and that action is what makes up and sparks the community. While mainstream views on waste cast it as disgusting, this understanding lives in GT side by side with a willingness to engage with it.

5.1.6 Glanhewch Taifon – summary

GT has now been introduced both in terms of context, history and activities as well as how waste figures and is viewed by those who pick litter in the group. To sum up:

- Context of litter. The area of Taifon has a long tradition of fly-tipping and littering –
 one which is not always driven by selfishness or lack of care, but rather one which is
 nuanced and has many roots and contributing factors.
- The action of litter-picking. GT sees litter-picking as an end as well as a means to an end: streets become cleaner and the picking provides an opportunity to meet neighbours and create community.
- **Perspective on litter.** The waste itself is understood largely as a hazard, but in the context of community action, this does not lead to standard, mainstream, capitalist choices for its management. While the litter is imagined to threaten their community and while stirring negative emotions of anger and disgust, the GT litter-pickers face the waste, rather than ignoring it.
- Role of litter. The litter, while negative, is the raison d'être for GT its role is to rally
 parts of the community to come together and care for the area, take positive,
 environmental action, and increase the community pride in Taifon.
- Community-based litter picking. The waste is picked by volunteers and put back where it 'belongs' – industrial facilities that can match its complexity. The process of planning and collection, however, is partially democratised, and further serves as a space in which community can be (re)built and in which citizens can perform the society and community they wish to see.

5.2 The Reuse Collective

The Reuse Collective is a charity, previously community interest company, in the English village Thornbridge, which is situated in the national park Stonehills. TRC is a reuse and recycling hub and centre (reuse hub for short), which means that they take whole and functioning, but unwanted, items, certain types of recyclable items and materials, which are not covered in the county council's kerbside recycling collection service, as well as garden waste for composting, which is done on site. The organisation also runs an organic café and

food shop, in this research known as The Food Shop⁴, as well as a vintage-branded store, Old & New, which takes the special, high-end, and unique items that are donated to the TRC. They also organise workshops and events every month, related to waste, reuse, upcycling, and DIY.

5.2.1 Context – a rural and divided setting

Before the 1990s, recycling was done relatively rarely on a national or regional level (Jones and Tansey, 2015). Certain pockets, such as community groups and some Local Authorities, which were motivated to look for solutions to landfilling, had started organising recycling. Waste services were, and are, often scarce, and sometimes neglected, in rural areas – for Thornbridge residents, the closest recycling centre for is 13 miles away. Kerbside collection is furthermore sometimes under-prioritised due to the distance heavy waste trucks would need to go in relation to the low amount of waste, recycling, and/or garden waste that can be collected. This is echoed by respondents:

"For instance, with the garden waste, when they brought it in, they didn't know where they were gonna take it at first, you know. [...] So I met a guy up the end of the road one day, jumping up and down on his little lorry, [...] trying to pack more on the lorry, and [...] he said 'it's no good, I'm gonna have to drive to offload it and come back for more', and I said 'oh where do you have to go?', and he said 'the other side of Stonehills', so that's right across the park, right across the middle of Stonehills, miles and miles, just to offload some garden waste." (Nathan, TRC)

Beyond being small with lacking waste services, Thornbridge is relatively bustling and vibrant for its small size, with a strong community, both in the sense of many tight intra-community ties, as well as many community-run projects aimed at having a positive social or environmental impact. Since the 1970s, the village has seen a steady influx of 'alternative' people. This has contributed to Thornbridge's reputation as a sustainability and community hub, but has not sat well with all of the village's original population. Many so-called indigenous Thornbridgians are sceptic towards these 'blow-ins', which have been labelled

⁴ The Food Shop is part of TRC, but as it is not focused on waste it will be left out of this thesis, except where it is necessary for understanding the frame and history of the organisation.

'tree-huggers' (Kat), 'yogurt munchers', (Kat), and 'whacky hippies' (Kelly), and have been accused of ruining the town's happiness "with [their] effing cappuccinos" (Nathan). While this has been an ongoing conflict for TRC, it is currently reported as being the calmest it has ever been. Even so, Thornbridge's atmosphere is viewed by many as key in shaping and instigating TRC, following notions of e.g. *alternative milieus*, which can serve as protective geographical spaces for experimenting and innovation (Longhurst, 2015).

Another aspect to Thornbridge that contributes to the framing of The Reuse Collective is its divided socioeconomic demographics. One part of Thornbridge is quite wealthy – this section of the parish includes landowners and 'original' Thornbridgians, wealthier blow-ins, and retirees. The other part of Thornbridge is less wealthy. Respondents point to this relative wealth as one of TRC's success factors: much of what is donated to TRC is often of high quality, from expensive brands, and not rarely vintage and/or antique.

These factors – lacking waste services, a bustling and community-oriented village, alternative and eco-minded 'blow-ins', and access to high quality second-hand goods – all contribute to framing The Reuse Collective and its success through the years. Some respondents say that TRC can only work in Thornbridge, because of its unique characteristics, while others are keen to spread the blueprint, regardless of context.

5.2.2 History of The Reuse Collective

In the late 80s and early 90s, there was a monthly waste service in Thornbridge, where the council put a skip in a carpark in the town centre, to which residents could bring their unwanted and broken items, including garden waste. A couple of residents saw this, and, compelled by what was seen as squandering, they approached the council. One of the founders recalls:

"I realised that people [...] had dumped a load of grass-cuttings on top of you know, household stuff. And I thought this is horrible, you know, because this is gonna go into landfill, and it's gonna create problems. I knew it was gonna cause methane and all the rest of it, and besides, which I thought, 'this is too good to throw away, you can make really good compost, all these materials would make really good compost'." (Nathan, TRC) The local council agreed to let them separate the garden waste from the bulky waste, and shred it on site. Initially, people were encouraged to take bags of shreddings to use in their own gardens or allotments, but there was little interest for this. After a while, they secured a space adjacent to an allotment site. The group brought the garden waste here, shredded it with a machine that the council had lent them, and built composting bays. The compost was given to the members of the group, and as the soil quality was poor, this was a valuable resource. However, life on the allotments became less idyllic every time the shredder was run, and after some time, the process of finding more suitable land was initiated. Simultaneously, discussions about starting a cooperatively run food shop and café were being had.

Together with a person from the district council, a funding bid was submitted to a large funding body, with the idea to open a community composting site, along with a polytunnel, and an organic café that would sell the food grown in the polytunnel and elsewhere, using the compost that had been created from local garden and food waste. The funding application was successful, and the group was able to buy a piece of land to set up their project on. This was one of the few times this, or any, funding body approved a funding bid for buying land or property.

One of the original aims in this funding bid was to create employment in this small village; to "create jobs out of people's waste" (Nathan). This was achieved through the grantfunding the project received, and later on, through the sales of the donated items in the reuse shops. While many Thornbridgians today recognise that TRC provides invaluable employment and volunteer opportunities, one of the founders experienced difficulties when transitioning from volunteer-led to paid positions:

"And the downside of it, big downside, which I really hadn't seen coming, was that all the kind of volunteer support, all the people who were doing things for nothing, helping out – we were all doing that – all that just dropped away, because there were people being paid now, so why would somebody be doing work along someone being paid, if they were doing it for nothing?" (Nathan, TRC)

When the land had been acquired and the composting system was up and running, the project soon became well-known and many people used it to drop off garden and food waste. For a

170

few years, composting of garden and food waste was the only activity being done on the site. It was less by choice, and more by chance and popular demand, that TRC eventually started taking in other things that organic waste. One respondent talks about the evolution of TRC and what drove it:

"From the start it was just compost and clippings, [but], after the jumble sales, we used to have really good jumble sales here, and all the stuff that jumble sales didn't sell, TRC would take them, and... we didn't have any buildings down there, nowhere to keep this stuff, the paint came later, and all this stuff gradually. [...] when we first started out down there, I was down there, repairing furniture, repairing things, and then selling them on. And we used to do a lot of... it was really a big playpen for us, we used to do demonstrations of things, of compost making, of sharpening things, and planting, and tree planting." (Eddie, TRC)



Figure 5.4. One view of the TRC yard, where antiques and plants are sold.



Figure 5.5. Another view of the TRC yard and the drop-off point, pre-opening.

TRC continued growing in terms of buildings on the site, as well as types of items, materials and wastes they would and could receive. Thatched-roofed, timber-framed roundhouses were crowded in with sheds and a barrack, all which evolved, were replaced and patched up throughout the site's soon 25 year history (see Figures 5.4 and 5.5, which show the yard where items are donated and sold).

In 2018, two big changes were undertaken: a new outlet was opened; and TRC transitioned to a charity. The new outlet, called Old & New, was set up in a small storefront in the town centre. Here, all the unique, vintage, weird, expensive, fancy things that are donated to TRC are brought, and sold in a boutique-style environment with hand-made furniture and alongside locally upcycled or crafted items (see Figures 5.6 and 5.7 overleaf). This is reported to have raised TRC's profile to those hard-to-convince indigenous Thornbridgians.

Around this time the organisation also made the decision to change to charitable status. This was mainly motivated by financial reasons: being a charity means getting VAT

back on sales, as well as being eligible to apply for a broader range of funding grants. However, being a charity also means needing a more formal structure, processes for everything, as well as having charitable aims. Charitable aims are often strictly defined – TRC decided to focus on education. This meant that TRC needed to steer more towards awareness-raising and education, which they have done in the shape of workshops and other events.





Figure 5.6. Treasures in Old & New.

Figure 5.7. Upcycled tools in Old & New.

The Reuse Collective is one of few community recycling and composting groups that are still going after 25 years. Throughout these 25 years, they have seen many versions of their own organisation, often driven by external pressures or requests to change. Their success is often attributed to the uniqueness of Thornbridge, but has also been proven to come down to an ability to change based on demand and context.

5.2.3 Services and activities – reuse, recycling, composting

The Reuse Collective provides services for garden waste and certain types of recycling, accept unwanted items and materials, sells compost created from said garden waste, hosts workshops and events geared towards education around waste and sustainability, and teaches skills around DIY and crafting. The garden waste is shredded and composted on site, in open bays. This has been an integral part of the project since its inception, but has also been the cause of accidents, poses various health and safety issues, and takes up much space. The compost is sold for a relatively low price. One respondent said:

"And there are things like the compost is... yeah, it's nice to have something that you know is, well I suppose, local." (Jane, TRC)

The recycling that is accepted is for example larger pieces of metal, as well as soft plastics, which do not go into kerbside recycling. The metal is sold on to companies trading with recycled/recyclable material, and income from this fluctuates according to market forces.

The reuse section of the organisation is the largest and brings in the most money. As has been mentioned, this has been a gradually growing part of the project, and has mainly been driven by people simply showing up with things. Residents of the area use and appreciate TRC for the fact that the items they donate will be well taken care of and will be given a new home. One respondent said:

"So obviously their loved books that they're then gonna get rid of, because [...] family members got old or moving, they bring them down here, because they know that they're gonna be valued. So I think you get into that virtuous cycle of that, that people see that we're gonna give a good home to their things, so they give us their nice thing, which then get passed on to someone. So I think everybody feels good about it." (Cam, TRC)

This, however, stands in slight contrast to what some of the respondents also report on the sheer volume of items that is received – not everything that is donated can be managed, and is sold on to be recycled, e.g. books for pulping and textiles for rags.

TRC also organises workshops and events. Workshops, skill-sharing, and demonstrating have long been part of the project, as has previously been outlined, but since becoming a charity, The Collective has started holding workshops every month, as part of their charitable aims around education. The workshops so far have included e.g. wreath

174

making from scrap materials, bird-box building from reclaimed wood, zero waste beauty products, repair and mending workshops, and talks on waste and sustainability-related topics.

TRC has always been run on a combination of staff and volunteers. Volunteers have been used for smaller, ongoing tasks, as well as one-off projects. Currently, some volunteer tasks include tool repair, some building maintenance, workshop running and skill-sharing. Previously, more tasks relied on volunteers, but as the organisation has formalised, fewer jobs rest on voluntary work. While volunteers have always been considered an important part of TRC, volunteers are also reported as taking time and effort to train, and as unreliable in terms of commitment, which is echoed elsewhere in research on community and volunteering (Luckin & Sharp, 2004), as well as the survey.

5.2.4 Vision and outlook – surviving and modernising

The Reuse Collective is currently in a process of overhauling the organisation. This is reported to be motivated by a wish to modernise the project:

"There's a lot of work that needs to be done about, kind of updating some of the background of it, because it's run for a long time as quite a community project, but it needs to be moved a bit more into the 20th century." (Kat, TRC)

Once the changeover to a charity is complete, the group wants to focus more on increasing its profitability, as well as education through awareness raising-and organising more workshops.

TRC is also constructing a new building on the site – all other buildings will be demolished to fit the new construction. This will answer to the concerns for health and safety that the limited space poses. These concerns arise from having multiple houses and sheds, between which are situated a parking lot and large composting bays. It will also push out the composting, which will be done off-site or potentially not at all, if suitable land cannot be found. While most who are involved understand the need for a new building, there is also a concern for losing some of TRC's uniqueness and history:

"I think with the new site, there's not really room for composting, and yet composting started the whole thing off, and it would be such a shame to lose that. It kind of like brings it down to earth, the compost." (Jane, TRC)

The Reuse Collective has been instrumental in putting Thornbridge on the map, and in sustaining a small village through times of urbanisation and austerity. While many respondents state that TRC works so well exactly because it is located in Thornbridge, many also talk about how it could, or could have been, a model or even a franchise for how communities elsewhere can empower themselves to answer to their own needs. This idea has been with some of the founders since the beginning, but has never been realised:

"For a long while, quite early on, I kind of envisioned that it would be kind of franchised, and that other communities, that every community should have a Reuse Collective, that it would be a model. And it doesn't seem to have happened at all. I don't really know why, because I would've thought it was a good model to copy in communities all over the place." (Nathan, TRC)

Many other groups, projects and communities have visited TRC through the years in order to gain inspiration and to understand what works and what does not, but so far, The Reuse Collective seems unique in the UK in its longevity, success, and broad range of services and activities.

5.2.5 Materiality of waste – unwanted items and materials

The Reuse Collective has now been introduced in detail – it has a long history, something that is rare in community-based initiatives. Regardless of if Thornbridge's uniqueness is the most important aspect of TRC or if it is one of many, the fact remains that TRC *has* been incredibly successful. The continuous stream of unwanted, but high-quality, things and materials is likely one of the reasons it continues to work.

TRC deals with a large variety of waste in varying ways – the wastes include compostable, reusable, recyclable, downcyclable, and upcyclable items and materials. The ways in which these are dealt with include composting on site, selling items for reuse and upcycling, using materials in workshops for upcycling and crafting, and selling e.g. scrap metal

(to be melted and recycled), broken or unwanted books (to be pulped and recycled), unwanted or damaged clothes (to be redistributed overseas or downcycled into e.g. insulation or stuffing), and soft plastics (to be melted and recycled or downcycled). As such, TRC's activities and services include a wide variety of materials, positions in the waste hierarchy, as well as handling options. Even so, these are more or less concentrated on the reuse and recycling levels of the hierarchy, and mainly confined to what is possible to do under non-industrial conditions. Table 5.2 below summarises how waste can be understood from the angles of composition, position, and representation.

Category and guiding questions	The Reuse Collective	
Composition		
What kind of waste/material is handled?	Variety of household, DIY and garden waste	
How is the waste/material handled?	Staff prepares waste/materials/items for selling for reuse or for recycling	
Who is viewed as responsible for the	Everyone is responsible; TRC facilitates people	
waste/material?	taking personal responsibility	
Position		
Where in the waste hierarchy does the waste/material fit?	Reuse, upcycling, recycling, composting	
Which position(s) of the waste/material are emphasised?	Wasting resources is squandering; waste is inevitable	
Representation		
Which role(s) does the waste/material have in the initiative/project/group?	Availability of unwanted items locally creates TRC	
Does the waste/material spark emotion?	Yes	
If yes, which emotion? (How) is this	Waste is upsetting; TRC provides the possibility to	
emotion resolved?	take positive action	
Is waste viewed as symbolic or representative for something?	Waste is a tangible form of environmental impact	

Table 5.2. Composition, position, representation of waste in TRC.

Following Table 5.2, the sections below introduce how waste figures and is viewed in TRC – waste is largely viewed as a resource, which needs saving; it is, however, also experienced as inevitable; lastly, while upsetting, waste is also seen as an opportunity to take positive action and create both social and environmental benefits.

5.2.5.1 Saving resources from going to waste

The view *waste as resource* is a key perspective in TRC. The waste that TRC handles most often still has use value left – clothes that can be worn again, books that can be read again, pots that can cook again, and so on. The garden waste that is brought is turned into valuable soil, the metal and plastic scrap are sold for a revenue to the market. As there is still *value*, whether that is use or exchange value, left in these items and materials, it follows logically, within standard waste discourses, that they are resources (Lane, 2011). In TRC, one common view is that *waste* is squandering of these resources, or squandering of value:

"Our kind of charitable purpose is the education and the preventing of wasteful disposal of resources and we do that through education, but also in the very nature of everything that we do, it helps the cause." (Annie, TRC)

The waste has already been created, so the challenge or opportunity is thus to make the most of it, i.e. a pragmatic and localised response to a global and complex issue. In the case of TRC, this comes as employment opportunities in a rural area and the possibility to offer cheap and sustainable things and material to the community. The waste that is brought in is, by necessity, not viewed as disgusting, desolate, destroyed, but rather brimming with potential:

"That's right, part of a component about it was to produce jobs, in the setup, but also a way of reducing depletion of resources and to husband them, to use them well, and to reduce waste... Jobs, of course." (Eddie, TRC)

The waste that enters the yard of TRC is meant to be recovered in one way or another – it will become a source of income and thus employment for locals by offering the people of Thornbridge an exciting and wild collection of items and materials to shop from, as well as by re-entering the rest into either natural or industrial recycling and recovery processes. As such, the waste of Thornbridge becomes the resource for Thornbridge. Letting it leave Thornbridge is thus a waste of resources, i.e. these need to be saved. This echoes standard waste management narratives of *waste as resource*, but does not lead to the same choices – most of the waste entering the TRC yard is seen as containing use value, i.e. it can be reused, while capitalist waste management rather focuses on recycling, incineration, and how waste can be

sold as raw material or fuel, thus only focusing on its exchange value. This indicates that *resource* does not always need to have capitalist or extractivist connotations.

5.2.5.2 Waste from human activity is inevitable

Waste is also seen as *inevitable* or as being part of society for the foreseeable future. This view is accompanied not by incredulity to the idea of zero-waste, but rather a sense of pragmatism. The ultimate goal is seen as a society without waste, but this is also viewed as being far away, and for some, as something that will never happen:

"It's one of those terrible dilemmas, that you know, by living you're kind of creating stuff that has some kind of harmful impact, so it's something that, to some extent it's almost unavoidable." (Roy, TRC)

"I keep wondering if we'll ever get to – what's it called? Post-waste? Post-stuff, I mean. But then I think we won't, will we? Because as people get older, and they have to leave their houses or... you sort of often get people's whole lifetime of books, clothes, furniture, everything, and that's gonna, obviously I don't see how that's gonna stop..." (Cam, TRC)

Wasting, or creating discards, is seen as a part of being human. Through this view, some of waste's properties are highlighted: its constant presence and its pressure on us to accept it. The education activities performed by TRC, for example, are thus not focused on creating a zero-waste society (some are focused on actions for a low waste lifestyle), but rather on how to reuse, reutilise, upcycle, and craft with items and materials that have already been used once. The inevitability of waste likely results from the objects that TRC staff and volunteers find themselves surrounded by:

"...but it's so many book donations, thousands and thousands, tons and tons of books, I mean just one week, one week, a few weeks ago, we got rid of half a ton of books, so that gives you an idea of how many-- and they're all damaged, they've been damaged, so I wouldn't get rid of any books that aren't damaged, so it gives you an idea of what we're processing." (Cam, TRC) The items and materials are coming in hordes every day, and as such, it follows logically that the people that see this find it hard to believe that a zero-waste world hides around the corner.

5.2.5.3 Waste as an opportunity for action

For TRC, waste symbolises a failure to husband resources and the environment in a sustainable way. The waste is where it should not be (Douglas, 1966) – it is in the wrong place in the waste hierarchy, i.e. it is landfilled or burned when it could be recycled or reused. By being in the wrong place, waste evokes emotions:

"I'm much more aware of wasteful behaviour, it's upsetting me now." (Stephanie, TRC)

"I get terribly upset if my husband comes home with a plastic bag, he gets a real telling off because he hasn't remembered to take a shopping bag with him." (Sylvia, TRC)

In this way, waste acts on the Thornbridge community in that it angers them to see squandering and failures to steward the environment. These negative emotions move and inspire to action (Moore, 2012). The type of waste that is acted upon – that which still has exchange and use value – orders these actions and activities into what they are. Simultaneously, waste is viewed to hold potential for positive, environmental, and community action. One respondent explains:

"[Waste is] a very good opportunity, because it is so tangible, to kind of find creative ways of dealing with it, which means that we [...] on a personal level, and kind of communal, you know, small scale level, you can feel that you can actually have some kind of control and agency." (Roy, TRC)

Here, waste is a tangible, simple, immediate opportunity to take personal, as well as community-based, action and responsibility on an issue that has both local and global implications. In so doing, this can lead to feeling empowered, and grant a sense of purpose and community. This is similar to how litter-pickers in Glanhewch Taifon see and feel about the waste that they are dealing with.

Waste orders, socially, spatially, materially and mentally, and in this way, it is constitutive of TRC itself as well as the actions and activities TRC performs. Waste's relentless properties force TRC:ers to pragmatically deal with what they are presented with. Instead of travelling further up the waste hierarchy, into the realm of prevention, they are forever encumbered with the daily additions (in the volumetric sphere of multiple tonnes a week) of would-be waste, which has only one potential pathway: pragmatic management and ordering. Nevertheless, this management contain potential and value: the value, both monetary and beyond, travels and multiplies across networks and purposes, to offer meaningful employment, an outlet for sustainable and fair goods acquisition for the local community, the possibility to provide access to responsible waste services, as well as community-based actions than span beyond immediate effects.

5.2.6 The Reuse Collective – summary

The Reuse Collective has now been introduced in terms of the context TRC finds itself in, its history and the services it provides, as well as how waste is understood and acts on the organisation and its users and staff. To sum up:

- **Context of rurality and waste.** The story of The Reuse Collective is told as the outcome of a variety of factors: lacking waste services, an interest in sustainability and local action, a community-oriented community, and a relatively high concentration of wealth in the surrounding area.
- Providing reuse and recycling services. TRC reduces the amount of waste going to landfill as well as industrial facilities through accepting unwanted items and materials, that are sold for reuse or recycling.
- Perspective on waste and unwanted items. Waste understood as a resource, which should not be squandered, as well as an unavoidable outcome of humanity. The only viable option for this constant stream is thus to *manage* it. In other words, waste prevention or a zero-waste world do not seem like possibilities.
- **Role of waste and unwanted items.** While waste evokes negative emotions, it, like for GT, does not lead to inaction, but rather offers an opportunity for positive action

that can be constitutive of community, individual responsibility, and feelings of meaningfulness and purpose

Community-based reuse and recycling. TRC retains the waste of Thornbridge, thus
retaining the value it contains: this is not only monetary; it is also in the form of
meaningful employment and volunteer opportunities, skills and knowledge, and
access to cheap and sustainable materials and items. Waste is thus not a resource for
capitalist accumulation, but rather for keeping a small town alive and providing
opportunities for people to take positive action.

5.3 The Stuffotheque

The Stuffotheque is an item-lending library situated in the English city Avenham, in the area Glasney. SOT is originally a grassroots project, which has since its inception in 2014 continuously grown and developed. The current version exists within a library as an independent unit. At the time of data collection, they had a paid team of staff of six people, around 10 regular volunteers, and around 1,000 members.

The Stuffotheque provides a lending service for things, for which they charge. While the service is thus not free, it is cheaper than hire shops – something that is mentioned by multiple respondents. The items are limited to around 70 things – these are the most in demand, borrowable, and easy to maintain. In 2019, SOT existed in one location. At the time of writing, they are in the process of opening four more spaces.

SOT wants to challenge the norm of private ownership, by making borrowing better than buying. They offer access, rather than ownership. This means that while not tackling the way things are produced or designed, they champion a different way of relating to stuff, one which foregoes private property, and which promotes sharing.

5.3.1 Context – environmental issues and small living spaces

The Stuffotheque is situated in a nuanced context. The backdrop against which SOT frames its objectives include issues around the environmental and social impact of certain consumer goods, and the challenges of living in a modern-day urban settlement, such as Avenham. On the positive side, SOT is intimately intertwined with place and community, and these have been vital in SOT's survival and development. The main issue that SOT positions themselves against is the private ownership of items where the material extraction, production, shipping, and retail journey are high in terms of land, material, water and energy use, and complex in terms of end-of-life management; and where said items are only rarely used by the end-owner. Such items include various tools and power tools, for example drills and saws; kitchen appliances, like ice cream machines and pasta makers; entertainment items, such as karaoke machines and GoPro cameras; and leisure gear, e.g. tents and backpacks (see Figure 5.8 and 5.9 for examples of items).



Figure 5.8. Pasta maker Pennie.

Another factor that frames SOT is the relatively small size of British living spaces, especially in Avenham:

> "Well, I think it's a good idea, I actually think that for people... for a lot of people that live in flats and small places these days, and you know, they don't have storage places..." (Connie, SOT)

Living in a larger urban settlement furthermore carries with it a risk of loneliness and isolation (Lai et al., 2021). Avenham is no exception, and respondents report struggling with either feeling like they belong in a community, as well as finding time for the community:

"I had a strange dynamic of kind of working either for myself, for 22 years, or working in Avenham, and living around here, but not really knowing anyone around here, and, you know, I don't think that's as unusual as it sounds, but when I look back at it, I think that's pretty weird, like it shouldn't be like that." (Colin, SOT)

Glasney, however, is considered by its inhabitants as an exceptionally friendly, communityoriented, and open and tolerant area. Many report it as having a 'village feel', even if it is located in proximity to a larger urban settlement. There are many community initiatives



Figure 5.9. Amplifier Jimi.

running in Glasney, including a Transition Town group, which rallies many of the residents around climate change and the environment, and contributed to SOT setting up in the area.

Like many areas in the UK, Glasney is experienced as going through a change. This is mainly through a process of gentrification, including a move to fewer independent shops and more chains. Glasney also experiences transience in terms of tenants, but is reported to have more pull factors than other Avenham areas. Many community spaces, such as community centres and libraries, including in Glasney, are under constant threat from stripped funding and budget cuts. There is a

recognised need to increase the relevance of these spaces as digitalisation and individualisation increasingly encroach on their realms. One of the SOT founders stated:

"...because the way libraries are going, like over 30 % of libraries in the UK are now closed, they're really important community spaces, often on high streets that are open to everyone, and have kind of a life. Well, lots of them, some of them are just books, but lots of them have much more going on in terms of activities and programmes and social, social skills training stuff for people in the local neighbourhood." (Elisa, SOT)

These factors – global issues surrounding material extraction, production and usage; as well as local issues related to living in a large city, i.e. time, space, money, loneliness and community – contribute to framing The Stuffotheque, its aims, and its activities.

5.3.2 History of The Stuffotheque

The Stuffotheque was started in 2014 by two friends who wanted to create a project that could have positive environmental and social impacts, and which could answer to some of the needs experienced by the founders, specifically around space and money saving. Since then, SOT has been run through three different models, each evolving based on demand, by trial and error, and through processes of formalisation and monetisation. Each model has brought with it its own set of successes and challenges.

The pilot model

SOT calls the first model *the pilot model*. It was initiated through a community-funding project aimed at spawning other community projects. The Stuffotheque was set up in the basement of a library – the basic concept was donations-based membership, meaning people could bring an item they did not want, and in return sign up for membership and borrow freely. No monetisation was involved at this stage – the objective was to test demand and to understand how this could be run in the future. SOT was based entirely on volunteers, and only open for a limited number of hours per week.

The project quickly became popular in the local area, and when the three-month trial ran out, the demand to keep going was high. However, due to space availability, SOT had to relocate. It took 18 months for the team, which had at this point grown, to find a suitable space. During this time, the project had also slightly changed shape, in an effort to solve some of the issues and challenges that this initial model had posed – especially around variability in quality of items.

The demonstrator model

Two shipping containers in an area close to Glasney became the new space. To kick this off, a crowd-funding campaign was successfully completed, with funds going to purchasing the containers as well as the items, thus initiating *the demonstrator model*. The containers were done up to serve as sufficient space for a till, a couple of chairs, and storage of the nearly 400 items that were borrowable at this point. SOT had left the donations-based model behind, as this did not guarantee quality nor borrowability of items. One founder recalls:

"So I think you're a waste stream for people, so if we say bring something you don't want anymore or use anymore, statistically we got much like out of the 100 things that were donated, only ten of them were suitable for use [...]. Like some people brought in a lampshade, like you can't really borrow that." (Elisa, SOT)

At this point, the project had been monetised, as borrowing now cost money. SOT was still run on volunteers, which was challenging, as volunteers are limited in terms of time, stability, and reliability. The founders were also giving their free time on the side of their full-time jobs. Other challenges included the sheer number of things; the limits to funds and knowledge for e.g. maintenance; and storage space.

A year into the demonstrator model, SOT's first paid team member was employed. The funds came from a grant scheme, and the person was hired to work closely with the community and volunteers. Shortly thereafter, another grant was secured, and the rest of the core team could be paid and make it their full-time jobs. After a couple of years in the containers, the team felt limited and restricted in their potential to grow and upscale the project. A process of finding suitable space was begun again, but this time around it was planned carefully. After having organised a workshop with representatives for different kinds of possible spaces, a library was chosen, the model was redesigned, and a crowd-funding campaign was launched again.

The kiosk model

The crowd-funding campaign was successful and paid for the relaunch of a new version of the Stuffotheque, called *the kiosk model*. This version was to live inside other spaces, be limited in the number and type of items that could be borrowed, and theoretically be completely self-service. 70 of the most wanted, most borrowable, easiest to store, and most ethical items were chosen. This was to answer one of the challenges of the previous model where items were of differing quality, had different spare parts, and large storage space requirements. An effort to source the items from as few suppliers and producers as possible was being made, with partnerships being struck with a number of such manufacturers. This ensured stability, lower costs, higher quality, etc. To cover increasing costs, borrowing charges were increased as well:

"[The prices] were much cheaper, actually, because it was still very much a trial of what worked. So the carpet cleaner now is like 20 quid for the day, back then it was like 12. And I think that was for like two days, so yeah, the prices were a lot cheaper, [...] so it was a lot more affordable.. it's still affordable now, but we had to adjust the prices, because of, you know, the amount of maintenance, and staff, you know, we've grown our team a lot as well, so.." (Andrea, SOT)

The core team was being paid and could focus their energy and efforts on developing the project:

"We couldn't be volunteer-powered completely, we couldn't make essential work be done by volunteers anymore. It just doesn't... it's not a viable way of working. And it doesn't, it doesn't work for anyone, it doesn't work for the volunteers, it doesn't work for us." (Sally, SOT)

One key volunteer role was that of the 'host'. This role includes being present in SOT, representing both the community and SOT, as well as helping people who are new to borrowing or who need assistance. This role was created to be impactful for the volunteer, but theoretically not necessary for the viability of the project.

The kiosk is set up as self-service, with items being displayed on shelves, but locked with wires and locks connected to an app. This had been developed in conjunction with a makerspace and was seen to be a valuable part of the project. However, the locks were unreliable and often malfunctioning, by not opening or closing when they should. This was the single-most reported issue from volunteers and was often a source of stress and tension.

The format for the project has also changed. To steer away from complex and timeconsuming grant funding applications, the team made the choice to switch to a company limited by shares, take out the original profit-lock, and sell equity in the company to raise funds for expansion and development. This was done under the umbrella of social investment, with investors being chosen carefully to put impact first, and profit second. One of the founders said: "It's still, it's in the grand scheme of things, like a, very much an impact first, social kind of business, that in many years' time might make a return for an investor, but it's not like a fast growth lucrative machine." (Elisa, SOT)

The kiosk model was always going to be the starting point for a franchising effort across the city, and later on, the country. Towards the end of my data collection, a new space in a different part of Avenham had been secured. At the time of writing, three new spaces are being planned, with the process having stalled due to COVID-19.

5.3.3 Services and activities – borrowing and workshops

Many of the services and activities that the Stuffotheque undertakes and provides have already been introduced in previous sections. First and foremost, SOT provides a lending service, for which membership is needed. Members can access all the things in the Stuffotheque for a cost. The service is called borrowing, but since it is monetised, it appears similar to renting or hiring. Costs are, as previously mentioned, lower than hire shops and terms are better for the borrower – for example, members do not need a credit card to borrow. The items that can be borrowed are



Figure 5.10. Me in a SOT t-shirt, attending SOT's one year birthday party.

divided into six different categories: adventuring, which includes tents and backpacks; cleaning, with items like carpet cleaners; cooking and hosting, with things such as pasta makers; DIY, including e.g. drills and saws; hobbying, with for example GoPro cameras; and gardening, which includes e.g. lawnmowers and strimmers.

The self-service kiosk was set up to be run without the presence of staff or volunteers. It is, however, currently run with hosts, as previously mentioned. These hosts are there to provide information and help for curious passers-by, first-time borrowers, borrowers who require assistance in anyway or who are less tech-savvy, and if there is a problem. The Stuffotheque also runs workshops and various events (such as social events, like the one I went to in 2019, as shown in Figure 5.10). They have monthly mending meet-ups, to which people can bring textiles that need altering or mending; monthly repair cafés to which people can bring their broken things, which are then repaired together with a fix-savvy volunteer; and other events, for example around DIY and gardening. These workshops are seen as opportunities for the community to be activated, and for individuals to give something back to their community. They are volunteer-based and free of charge.

5.3.4 Vision and outlook – expanding The Stuffotheque

Founders and team members report that it is expensive to run an item-lending library the way SOT runs it. Things need purchasing and maintaining, software needs to answer to the specific requirements of a self-service library, and staff need to get paid. Many other item-lending libraries are mainly volunteer-run and donations-based, but this is something that SOT strives away from, as it reduces upscaling potential.

Current and previous income streams for the Stuffotheque include crowd-funding; borrowing charges; consultancy; grant-funding; and selling equity in the company. Future incomes are aimed to also include franchising revenues, i.e. selling plug-in kiosks to communities, Local Authorities, libraries, retail spaces, housing associations and so on. The organisation was, at the time of data collection, reliant on around 25 % of their income from sales, and 75 % from grants.

After going through many arduous and painful processes of testing what works and what does not, and receiving interest from various communities, the team made the decision to become more like a franchise of item-lending libraries:

"Like we were always like in a testing frame of mind, like nothing is ever completely finished, so we were testing software, opening hours and pricing and things like that, and by the end we were having so much interest from around the country, and around the world in fact, like really covert places like East Timor in Indonesia and like remote parts of like Canada, and Seoul, Korea, and places like that. I think someone even came over from Korea to visit once. And we knew that this was something that should be replicated." (Elisa, SOT) The vision is to have a SOT in as many neighbourhoods and communities as possible. While this might not be a feasible vision for the near future, this is how a Stuffotheque works best. One of the core team stated:

"There's definitely an argument for it being, yeah, very hyperlocal, like having one at the end of your street, or even in Glasney.. Glasney is quite a big place, in a way, if I had to walk to like the other side of Glasney to borrow something, I don't know if I necessarily would do it as often as if I would if it was around the corner from me, so yeah, people like having it very close by." (Andrea, SOT)

The point behind becoming a franchise and selling plug-in kiosks to communities was to help people to not have to go through the same processes as the founders needed to. This way, communities can access these years of experience that the team has.

The motivation behind starting SOT was to have an impact, both environmental and social. The social impact might come on its own for many of the future plug-ins, as SOT only goes where there already is a community. However, as the project is small and run on a local scale, the environmental impact is more difficult to achieve. One of the founders said:

"But it feels, like in the longer term, far more helpful for us to achieve that mission, you know, because we will need capital to spend on software, or negotiating contracts with big suppliers, we need the kind of scale, that will enable us to influence, basically, and make actual changes to the way in which we consume." (Elisa, SOT)

The Stuffotheque has changed from the point at which they took part in the initial survey for this research project to the time of writing this thesis. The organisation is constantly changing, experimenting, and testing out new ways of doing business, of creating community, and of organising, designing, and facilitating access to things.

5.3.5 Materiality of waste – the lack of rubbish

The Stuffotheque has now been introduced in depth – compared to Glanhewch Taifon and The Reuse Collective it sits furthest away from most community-based responses to waste, in the sense that it incorporates a profit component (the definition of a community waste project includes being non-profit). This was not always the case, as the organisation has gone through multiple models and stages. The initial concerns – global extraction and production processes, waste arisings, lack of community, and the need for a money-, time-, and space-saving initiative – still frame SOT's services and activities.

The Stuffotheque differs from the other two cases in that they do not deal with any kind of waste at all: their goal is to prevent the waste from happening in the first place. As such, the role of waste is not as clear-cut for SOT as for TRC and GT. Waste is more often talked about in general and abstract terms, and as a societal problem to solve. Table 5.3 summarises the composition, position, and representation of waste in SOT.

Category and guiding questions	The Stuffotheque
Composition	
What kind of waste/material is handled?	No waste; things, equipment, appliances, tools
How is the waste/material handled?	Borrowable things neatly displayed; lent through self-service
Who is viewed as responsible for the	Government, but it does not act; up to people to
waste/material?	solve environmental issues
Position	
Where in the waste hierarchy does the	Prevention
waste/material fit?	
Which position(s) of the waste/material	Borrowing can prevent waste
are emphasised?	
Representation	
Which role(s) does the waste/material	SOT exists to prevent waste and reduce
have in the initiative/project/group?	consumption
Does the waste/material spark emotion?	Yes
If yes, which emotion? (How) is this	Waste is upsetting and horrible; SOT is a small
emotion resolved?	solution to reduce waste
Is waste viewed as symbolic or	Waste is a result of consumerism
representative for something?	

Table 5.3. Composition, position, representation of waste in SOT.

Waste prevention figures as one of the main goals of SOT – examining the materiality of waste takes an interesting turn in this case, since SOT does not engage with physical waste. The

following sections thus focus on how abstract waste figures as an environmental threat, and how waste prevention seems possible due to the lack of physical waste in the vicinity of SOT.

5.3.5.1 Waste as environmental threat

Waste is largely viewed as a problem for the environment, and less so for humans. In Glasney, there is no waste threat to the community – compared to Taifon and Thornbridge, it is untouched by the presence of litter or squandering of resources. Waste, and the processes implicated in its creation, are seen as generally threatening the state of the planet, and thus sharing to prevent waste from being created is seen as the solution:

"Well, I do think [the reason The Stuffotheque exists is] the climate in a way, sort of, less waste going to landfill." (Camilla, SOT)

"There is no alternative, you know, there is no magic wand here, you know, we can't kind of say 'Oh well, everybody can have a bread maker', [like] somehow there's gonna be no environmental cost to that." (Dan, SOT)

Waste is mainly viewed as something negative. It is not seen as a bountiful and abundant source from which to gather resources, and it is not seen as a manageable object, which simply needs to be put in the right place. Its very existence is an environmental threat, as well as a failure of society, and the Stuffotheque is seen as a solution. Being a threat, waste is posited as *bad*, and as something that should not exist. Where for both GT and TRC the *waste* itself was out of place (Douglas, 1966) – as in it is on the streets when it should be in bins, or it is being incinerated when it should be reused – its very existence symbolises something out place for SOT. It should not exist, not even in the appropriate places – there is no rightful place for waste. This partially echoes of the capitalist notion *waste as hazard* – however, applied in this context, *waste as hazard* rather problematises the siting and existence of landfills or incineration plants for example. The view held by SOT respondents is that waste, wherever it goes, poses a problem, one which should not exist to begin with.

Since waste is an environmental threat, is also gives rise to emotions. As previously outlined in this chapter, litter and squandering of resources upset and anger. As identified by Moore et al. (2018), waste also holds power to cause anxiety. It does so by reminding us of

the imperfect, unsustainable, and contradictory conveniences the modern world is built on. One respondent talks of her difficult relationship to waste:

"I have an allotment, and I bought a big cordless strimmer, and I only used it 5 times, and we're talking a big strimmer with a big battery, and these things cost a lot of money, and I used it 5 times and then it stopped working. And you know [...] I can't bear putting this into landfill, it's just such a waste of resources, just such a waste of resources [...] I mean, I could've afforded to buy another battery strimmer, I could've afforded to buy one, but I just can't bear the thought of sending things to landfill, I hate it going to landfill, I hate it. I absolutely hate it." (Camilla, SOT)

This respondent views SOT as a solution to her anxiety-riddled relationship to waste. SOT can afford higher quality products, sturdier versions, and can accumulate use on fewer items. The Stuffotheque can provide the possibility to prevent waste, and thus prevent some of the anxiety that waste causes.

5.3.5.3 Waste prevention is possible

Waste is often held as the main thing that SOT:ers fight against. However, not in the same way as GT and TRC – the waste is not immediate, as in, it is not *there*. The area, which SOT finds itself in, is furthermore not close to any waste site. The waste that The Stuffotheque and their patrons oppose is more often an idea, but one which guides the operation as well as the imaginaries of the engaged individuals – waste is the problem that SOT solves. Individuals, such as Camilla above, might have personal experience of malfunctioning items that they have come to own, and have had to subsequently discard, but the idea of waste as a serious threat comes from relatively little first-hand experience, compared to TRC and GT. There, residents and participants see piles of litter on their street, or bag after box of stuff being dumped every day. As such, waste does not itself, as a physical object, act on and order the Glasney community to take action. Instead, it is the idea of it, and perhaps the images of looming mountains of garbage or turtles with straws in their noses that spur action and a will to act (cf. the aforementioned *Attenborough effect*).

As there is no glaring local issue with waste that orders intra-community relations, the fact that the physical versions of waste are absent further determines what is possible to

imagine: a world in which waste can be prevented. One respondent comments on the presence and absence of waste:

"I just mean like there are parts of the country that are probably much more aware of it, [...] I think if you go to Cornwall and other places like that, they're hyper aware of that they need to stop throwing plastic into the ocean, because they're seeing it on their beaches, so it depends on where you are and what affects you." (Jacob, SOT)

Waste is an environmental threat, and this can be opposed and solved, and in the process the community can also be activated, but it is not activated *by* any physical waste. In this way, (physical) waste does *not* act and inspire to action on any kind of sociomaterial plane, but it is rather its absence that makes a waste-free world seem possible. This simultaneously indicates that OSOMism should perhaps be complemented by OSNOMism, which stands for *out of sight*, not *out of mind*, as the waste is not there, yet is still viewed as a threat.

The Stuffotheque further cements the absence of wasted things by naming the items that they lend out – as is shown in the pictures on p. 179 and 180, each item is called something, e.g. Jimi the Amplifier. This could serve to humanise and *de-objectify* the items, further removing them from their stuff-and-potential-waste status. It could also be argued that a name will increase the care shown for the items by borrowers.

5.3.6 The Stuffotheque – summary

As has been indicated in this chapter, The Stuffotheque presents an example in which business and radicality co-exist (this will be further scrutinised in Chapter 6). SOT has been introduced through its context, history and services, as well as how abstract waste figures and plays a role in how the organisation works and is viewed by its users. To sum up:

- Context of large city. SOT has come about through a combination of local and global; individual and structural; ideological and practical forces and factors – small living spaces, wishes to save money, consumerism, loneliness, etc.
- Borrowing as a service. SOT prevents waste through their services and activities however, this is only limited to the 70 items that are borrowable.

- Perspective on abstract waste. As waste does not figure as a physical object, the idea of it takes a different form than in GT and TRC. It becomes an environmental threat, something to fight against. Waste constitutes a hazard, as it does within capitalist waste management, but the response is not to hide it by feeding it into an alienating industrial machine the response is rather efforts at preventing it from ever happening.
- Role of abstract waste. The absence of waste makes zero-waste or waste prevention seem possible, unlike in TRC, where waste is seen as inevitable. This possibility makes an item-lending library feasible and desirable.
- Borrowing for communities. To its users, SOT presents a small solution, where communities can engage locally with global issues, while meeting other needs as well as contributing to building community. While the waste prevention is, as has been highlighted, partial and incomplete, it still showcases a different pathway and way of engaging with stuff.

5.4 Rubbish, community and post-capitalism

The views on, and roles of, waste are multiple and complex – for each case, they are born out of the context these participants and groups find themselves within as well as which type of waste that is dealt with. By interrogating materiality from different angles, i.e. composition, position, and representation, this chapter has shown that material, things, waste, and thoughts of waste all have impacts on what kind of action seems possible, feasible, and desirable. Table 5.4 highlights and summarises differences and similarities between the groups.

	GT	TRC	SOT
Context	Littered, urban area, lack of community pride, historical waste management	Rural area with lacking waste services, community- minded town	Densely populated, urban area, consumerism
Activities	Voluntary litter-picking	Reuse hub, recycling, compost	Borrowing as a service
Perspective	Waste as hazard; waste as threat to community	Waste as resource; waste is inevitable	Abstract waste as an environmental threat; hazard; prevention is possible
Role	Litter stirs emotions, which instigates action to pick it	Waste squandering stirs emotions, instigates action to save waste	Abstract waste and environmental impacts upset,

			instigates action to prevent waste
Outcome	Residents engage with the	TRC retains value, moves	Small solution to complex
	waste; collaborates with	waste up the hierarchy;	issue; lack of physical waste
	council to care for complex	provides meaningful	issue makes prevention
	waste	opportunities	possible

Table 5.4. Summarising three community waste projects and what the materiality of waste highlights.

5.4.1 The beginning of a post-capitalist waste approach

As is evident through Table 5.4, there are certain themes that emerge across the groups that have implications for post-capitalist approaches to waste. Specifically, four things have emerged throughout the questioning of the materiality of waste in each initiative: (1) standard capitalist perspectives on waste are present in these organisations, but do not lead to the same outcomes; (2) context is an important factor in community-based waste action; (3) emotion plays a big role in community action on waste; and (4) groups moralise about, and even *hate*, waste, but waste still offers opportunities for positive action. These four connect with each other, and will be expanded upon below.

The two standard, capitalist waste perspectives – *waste as resource* and *waste as hazard* – are each present in at least one of the cases. For GT and SOT, waste is a *hazard* – it threatens communities and the environment, both by being present and absent in each locality; for TRC waste is a *resource*, because it contains the possibility to keep Thornbridge alive. However, the presence of these perspectives in these organisations does not lead to standard, capitalist waste management strategies. While true that GT could not pick without the support of the council, that TRC could not operate without selling to the recycling market, and that SOT could not lend without buying items produced under capitalist conditions, the activities and services of each one are not focused on large-scale, industrial, tech-heavy operations, in which individuals are urged to only consume less or recycle more, and prefer to, the rest of the time, ignore waste's presence and issues. In these community initiatives, waste is still acted upon, no matter how imperfectly, and it is done without statutory responsibilities and profit interests. This suggests that the presence of other motivations could be crucial in how waste could be viewed and organised in post-capitalist waste approaches. It also suggests that *resource* and *hazard* perspectives *become* capitalist in capitalist contexts – as such, if the context is

community or another space beyond capitalism, which is motivated by something other than profit and statutory responsibilities, these perspectives could lead to other outcomes.

Context has been highlighted in this and previous chapters as an important factor for community action. Context in relation to the materiality of waste can be understood as complex and layered. In each case, waste has been identified as connected to action, type of action, and the community or area itself. As such, context is created through a complex combination of presence or absence of waste, and other contributing factors, such as urban/rural setting and sociodemographics. Proximity and attention to context can, as such, be viewed as important factors in how waste is viewed and managed. Allowing the waste itself to determine what kind of action is needed, rather than a one-size-fits-all approach, can be understood as a key factor for post-capitalist waste strategies. Attention to context also highlights that waste strategies could involve more than kerbside collection, and reach into the realms of prevention as well as managing rogue materials in more sensitised ways.

For interviewees in all three cases, waste also stirs emotions, often focused on anger, disgust, and upset. Waste as out of place – meaning found on the floor or squandered – gives rise to these emotions, but also creates the urge to correct it, i.e. waste instigates action through emotion. This is a crucial difference between how waste acts on communities versus how it acts on Local Authorities or for-profit companies, and the subsequent outcomes. Beyond sheer possibility – community groups rarely own incineration plants – one distinctive feature of community action is that the emotions that arise are given assent and will drive action more than on a state or market level. Individuals who find themselves in the private or public sectors might still be very upset at seeing litter, but it is not this emotion that drives these sectors' action on waste. In the private sector, it is mainly profit; in the public sector, it is statutory responsibilities and policies from above. If able, communities will also do more than is required of them (cf. public sector – although some LAs do of course do more than is required of them) and will do that which is not profitable (cf. private sector). This can be understood as their motivation being based, at least partially, on emotion. Their action is often small-scale, and initially informal, enough that individuals' emotions are allowed to play an important role in whether or not the action is instigated, and how it is shaped. Waste is powerfully emotive – however, it is only in community action that this emotive aspect fully comes into effect and drives action. Allowing emotion to play a role could be viewed as a key feature of a postcapitalist waste strategy - it would run counter to the techno-fix operations and views that guide standard waste management today. Emotion can thus serve to *de*technicalise waste and how it is being handled, which would align with a post-capitalist approach to waste management.

Whilst waste creates negative emotions, the action that follows is often seen as highly positive – both as a small-scale solution to a perceived global problem, as well as providing additional social benefits, as highlighted in Chapter 4. Waste, litter, and waste prevention are seen as relatively simple and tangible opportunities for individuals and communities to take action on environmental issues – waste is viewed as a symbol for larger, and sometimes more intangible issues, such as resource depletion, pollution, and climate change. Exactly because waste is a physical thing (except for SOT), it becomes a convenient proxy for these larger issues. For SOT, the physical act of borrowing is still thought to have a multitude of impacts upstream and downstream: less waste to landfill, less consumerism, less greenhouse gas emissions and so on. Those who participate feel like they are part of a solution to these issues, albeit smallscale, and picking, reusing, and borrowing are seen, understood, and experienced as highly positive and rewarding actions to engage in. This suggests that waste can inhabit a dual space of being both a positive and a negative - something which could be incorporated into postcapitalist waste strategies. Similarly to adopting a parallax view on what waste does and represents, adopting a dual stance of waste as an undesirable and problematic outcome of capitalism, yet simultaneously as something that can give rise to community (re)production and other social benefits seemingly emerges as an important post-capitalist feature. This also highlights how present post-capitalist waste strategies need to employ pragmatism and idealism in parallel. Since the waste that exists today is capitalist waste, its existence needs handling (pragmatism), yet it also needs solving (idealism).

By accounting for how waste figures in these community waste projects, a set of principles for post-capitalist waste approaches begin to emerge. These are practiced by, or exist in, the three cases under study, and serve to suggest what a post-capitalist waste approach might pay attention to. The principles identified are focused on motivation, how strategies or ways of working are contextualised, how waste is understood as cutting across spatialities and temporalities, that emotion is allowed, that waste is not be understood as solely problematic or unproblematic, and lastly that these approaches account both for current wastes as well as prefigure more just and sustainable waste practices and systems. Figure 5.11 below summarises these factors. What should be noted at this point is that these have arisen from solely

198

interrogating community-based waste action for how waste is viewed and what role it plays. Next chapter will turn to commoning, which specifically looks at how initiatives are *organised* and what the implications of this are for post-capitalism. As such, this chapter have begun discerning post-capitalist approaches and strategies for the organisation of and for waste, but this project is not yet finished.

MOTIVATION

Motivated by other (or additional) factors than profit or statutory responsibilities.

ALLOWING EMOTION

Waste causes emotion which can instigate and inform action. Emotion can serve to detechnicalise techno-fix WM.

CONTEXTUALISED STRATEGIES

No one-size-fits-all, since waste and context will determine what is needed.

DUALITY OF WASTE

Waste needs to be viewed as both negative and positive, since it has env. impacts, but can create moments of action. **BROADER STRATEGIES**

Waste is complex and connects across sectors, material flows and spatialities.

PRAGMATIC IDEALISM

Strategies need to account for current capitalist wastes, while also engaging in more just and sustainable waste practices.

Figure 5.11. Emerging materiality principles for post-capitalist waste approaches – discerned through attention to materiality. These are practiced by present community waste projects, but can be relevant also for e.g. Local Authorities, in the present as well as the future.

5.4.2 Imperfect action on complex materials

Lastly, one final point should be made at this stage. Beyond an initial set of features for postcapitalist waste approaches, what furthermore emerges through examining these three cases for how waste's materiality figures, is that there are limits to what can be achieved. As mentioned above, capitalist waste *does* exist and needs to be handled to avoid serious negative impacts on humans and non-humans. The items and materials that the groups engage with now are born out of hundreds of years' worth of discovery and innovation, as well as geographical expansion of extractivist processes, and are still the results of complex production processes, supply chains, and material flows. To disassemble such things and materials safely – meaning to contain and, if possible, neutralise potential toxins and hazards (Gregson and Crang, 2010) – the complexity of the extraction and production process of these items and materials needs to be matched by their end-of-life management. This is highly challenging to achieve through community action.

The above is *not* critique of these individual initiatives, since it is not the aim of GT to disassemble cigarette butts safely, nor the aim of TRC to melt metal, nor the aim of The Stuffotheque to change the production process of the items they offer. However, looking at exactly these aspects reveals the limitations of community action on waste in the face of capitalism. Capitalism produces these items and materials, as well as the conditions under which they are normal to use – community action on waste can only do so much with such complexity. This is not to say that community organising is and always will be insufficient, and that industrial processing is unproblematic, because it is needed under current conditions. The purpose is instead to utilise this evident limit in order to question the use of such materials and items, if they cannot be produced and handled in sustainable and just ways. In this way, community action itself highlights how and when mainstream production processes and waste management strategies are insufficient.

5.5 Summary – community-based approaches to waste

In this chapter, I have introduced three cases of community-based approaches to waste. This brief introduction served to add additional details and depth in addressing RQ1:

RQ1: What are the characteristics and possibilities of the UK Community Waste Movement?

Some things echoed Chapter 4, such as the diversity within this movement, both in terms of waste focus as well as organisational format; the importance, but difficulties of working as, or with, volunteers; and that community groups often have multiple aims and impacts. The chapter further added that the context within which a group or initiative is situated has an important impact on what kind of group and action is created and performed. This chapter also addressed RQ2:

RQ2: What is the role of, and perspectives on, waste in Community Waste Projects, and what are the implications for post-capitalism?

Waste plays an important role in these groups – the rubbish that they fight against is constitutive of the group itself as well as the action the group undertakes. Rubbish constitutes the enemy to battle against and the vanquished rubbish is the cause to rally around – whether that is picked, saved from landfill, or prevented. Community action is thus created through rubbish. The understandings of waste are manifold and nuanced, but *waste as resource* and *waste as hazard* are clearly not reserved only for capitalist waste management. These perspectives are also present in the community realm – there, however, they do not lead to the same outcomes. One perhaps obvious reason is that community groups simply cannot build and operate an incineration plant, but other, more nuanced and hitherto unnoticed reasons include the emotive aspects of waste and the fact that emotion is allowed, and even vital, in community action.

This suggests that while it is crucial to pay attention to materiality, community groups do not exist in a vacuum, and are themselves carriers of dominant perspectives. Carrying and embodying a dominant understanding of waste does not, however, have to mean that the action that follows is aligned with capitalist waste management. From a holistic point of view, where extraction, production, consumption, and end-of-life management are all considered, community action is still fragmented. The complexities of capitalist waste are beyond the total reach of community groups – however, as these three cases show, parts of this process can be reclaimed to be performed more locally, responsibly, sustainably, and fairly, while simultaneously creating impacts that go beyond waste tonnage.

By bringing together the materiality of waste with community action we can begin discerning what post-capitalist approaches to waste might need to pay attention to. Six such principles were identified here: (1) how motivation needs to stem from something else, or more, than profit and statutory; (2) how waste approaches need to be sensitive to context and not bring a one-size-fits-all perspective; (3) incorporate the perspective that waste is intimately intertwined with what happens elsewhere and upstream, i.e. extraction, production, distribution and so on; (4) emotion being a valid and guiding factor in how waste is acted on; (5) that waste needs to be viewed as not all bad yet not all unproblematic; and (6) that we need to employ a pragmatic and simultaneous idealist approach to waste, whereby current capitalist wastes can be managed, and where more sustainable waste practices and systems are still strived for. These six principles are more or less practiced in current community-based waste initiatives, and can also be seen as the beginning of how we can approach post-capitalist waste strategies. The next chapter will add an additional layer by paying attention to organisation.

As such, Chapter 6 will continue exploring how these groups organise, and will do so by examining the cases through the lens of commoning, specifically if and how the groups meet needs, how they organise (bottom-up or top-down; and through cooperation or competition), if and how they utilise capitalist market-based tools, and how they relate to ownership. Engaging with real-world examples of community-based waste approaches through a lens such as commoning will allow for further developing an understanding of how post-capitalist approaches to waste might be conceived of, designed, and implemented.

Chapter 6: Commoning in Community Waste Projects

This chapter will focus on how community waste projects practice commoning. The Community Waste Movement has been introduced in detail – its composition, characteristics and a cautious, early examination of its potential were outlined in Chapter 4. Projects and initiatives here are diverse, but have in common that they deal with or prevent waste; are community-based or third sector; are vital to society, yet struggle with existing in a profit-based system; and have impacts and influences beyond their aims, such as contributing to community-building. Chapter 5 went further and introduced three examples of projects that belong in the CWM. These were detailed in terms of history, context, activities, and outlook. They were further examined for which kind of waste views were present amongst participants, which role waste played in each organisation, and what this might tell us about a post-capitalist approach to waste. This chapter told the story of three thriving, yet struggling, groups, who have been born out of waste, context, emotion, community, and a willingness to do more. This chapter also initiated the search for principles that might inform post-capitalist waste approaches.

In turning to commoning, this chapter will address RQ3:

RQ3: How is commoning practiced in Community Waste Projects, and what are the implications for post-capitalism?

It will do so by examining each case according to the five commoning features (see Section 2.3.4), and then further analyse, discuss, and reflect on how commoning is and is not, can and cannot, be practiced in community waste projects. It will end by outlining the implications of this for how we might further understand post-capitalist waste strategies. The aim of this chapter is not to determine whether or not a project *is* a commons or a commoning initiative, but rather *how* these projects engage with principles that represent dividing points between capitalism and alternative systems or modes of organisation in general, and commoning in particular.

The chapter is divided according to commoning feature – each section begins with a table that summarises how each case exhibits the feature in question, followed by an in-depth examination of how community waste projects in general, and the research cases in particular, engage, or do not engage, with said feature. The chapter ends with a discussion and summary of how community waste projects practice, or do not practice, commoning, as well as the implications for post-capitalism.

6.1 Meeting needs

The first feature of commoning is meeting needs. Chapter 2 introduced each feature and a set of questions for how to approach each of them empirically and analytically. For commons-based need-meeting, these questions are:

- Which needs are (attempted to be) met?
- How are these needs met?
- Which needs are not met and why?

Table 6.1 overleaf summarises the answers to the three questions above. As this table indicates, community waste projects meet diverse needs in diverse ways, yet more similarities than differences emerge. What becomes evident here is that context remains an important factor; that needs are basic, social as well as relate to the environment; that synergies arise when community initiatives meet needs; and that complexity of context and waste is limiting the need-meeting capacity that these groups have. These will be expanded on below.

Case	Which needs are (attempted to be)	How are these needs met?	Which needs are not met and why?
	met?		
Glanhewch	Clean streets, active + proud	Joint litter-picking and greening; lead	Identified needs are not yet fully met;
Taifon	community, friendly neighbourhoods;	to synergistic and reinforcing	Taifon keeps getting littered – limits to
	these needs are insufficiently	outcomes, e.g. cleaner community \rightarrow	community action in meeting these
	met/cannot be met by city council	prouder community $ ightarrow$ less litter	needs
		dropped	
The Reuse	Access to waste services, shopping,	Community centre that takes	Certain wastes are turned away, due to
Collective	compost, education, employment,	unwanted items, materials + creates	complexity, thus cost, of dealing with the
	saving resources from squandering;	employment + hosts workshops; leads	type of material/item
	these are partially/unsustainably met	to synergistic outcomes, e.g. access to	
	by state and market	shopping → bustling town with pull	
		factor \rightarrow more employment	
The	Access to things without the need to	Lending items for a cost + organising	Because of challenges for ILLs, only 70
Stuffotheque	own them, to save space, money,	workshops; less synergies than GT and	items are lent out + some costs are high
	time + tackling consumerism + active	TRC – access to things met through	for some people; lending does not lead
	community; these are insufficiently	lending, active community met	to social opportunities due to self-service
	met/unmet by state and market	through workshops	

Table 6.1. Need meeting in CWPs.

6.1.1 Unmet needs in different contexts

The needs that the three groups meet, or set out to meet, are mainly unmet by state and market. Some of the identified needs, however, are theoretically possible to meet through state provision or on the market, but doing so would not align with the values or goals of organisers, volunteers, or users. These values are, for example, related to environmental sustainability, social justice, or local impacts of waste management:

"It's been a really valuable thing, because for so many people, they may have the desire to behave in an environmentally good way, but you know, unless there's some infrastructure for that, it's often very difficult, and I think The Reuse Collective does provide some of that infrastructure, if you'd like, so that's good." (Roy, TRC)

This quote by Roy serves to represent how certain needs can be felt, but the context will determine whether or not those needs are possible to meet according to specific values or possible to meet at all. Simultaneously, context also determines which needs are felt to begin with. Echoing Chapter 5, litter will not be picked where there is none, but more importantly, there is no *one size fits all* in community organising. Community efforts will always respond to, and be shaped by, the local context and the needs experienced in that context. Needs are *always* context-specific (Meretz, 2012), but this is not accounted for in mainstream waste management – there is no waste strategy specific to Thornbridge, no historically informed litter policy for Taifon, and no library programme in Glasney. While context-specificity is not accounted for, it is what is needed, and it is furthermore practiced in community waste initiatives, which strengthens the case for how community groups go about providing for these needs. This is not to say that community groups *should* be responsible for meeting basic human needs, but that the there is potential in what community groups do.

6.1.2 The combination of basic, social and environmental needs

Chapter 4 identified the ability of community initiatives to provide multiple outcomes through their activities. Viewing these initiatives through a commoning lens further cements this argument. The needs met through the three cases under study are a combination of basic needs (e.g. waste services), less basic needs (e.g. access to a bread maker), social needs (e.g. community), and environmental needs (e.g. climate action). Following what was outlined in the previous section, some of these needs are ones that the state should provide for, but does not (e.g. waste services), and others are more nuanced (e.g. community). What emerges from examining the three groups and how they meet needs is that, while the needs in each context are different, the groups have the ability to engage with different types of needs simultaneously, something that state-led or market-based waste management and service provision do not do to the same extent.

Social and environmental needs emerge as important and interesting points of difference between community waste projects and capitalist waste management. The needs that relate to the social, i.e. creating or supporting an active community, are needs that state and market cannot meet, and furthermore, do not attempt to meet, through waste management. This will be further explored under *Cooperation*, but an important point should be made here: community is based on multiple factors, but a key factor, which was identified in these initiatives, is *doing something together* (Fournier, 2013). State and market can support, but meeting needs for community can only be done through voluntarily *doing in common.* GT, for example, theorises that if Taifon's inhabitants feel a sense of pride in their community, this will lead to less litter dropped in the first place, echoing suggestions that increased social richness decreases emphasis on material consumption (Doran, 2017). Pride in one's community, however, is not achievable through state means or on the market. As such, meeting the (social) need for community is an ability that only exists in the community realm, yet is something that has potentially far-reaching impacts.

Environmental objectives take an interesting shape when viewed through commoning. The initiatives under study here all identify the environment or the climate as a reason they exist, and while environmental objectives contribute to framing mainstream waste management as well, Chapter 2 identified how the environmental issues associated with waste arise not only in spite of standard waste strategies, but also because of them. Commoning most often emphasises *human* needs, yet here, *the environment* is seen as being in need as well. Especially TRC puts a strong emphasis on protecting the environment, through providing a more sustainable service than what is provided by state or market, but also through education and promotion. Such promotion, however, of e.g. the importance of protecting the environment does not qualify as meeting a *human* need on par with e.g. waste services or community. The need, then, could even be seen as not belonging to a human, but

rather a non-human. While this could be viewed as *targeting* people instead of meeting their needs, and thus echoes of needs *creation* – which was identified as a capitalist tool for continued growth (Euler, 2018) – the message that these groups, especially TRC and SOT, promote is one of less consumption, meaning that the needs creation here is fundamentally different to what it is under capitalist conditions.

As such, these groups show that community initiatives can engage with multiple need categories simultaneously – basic (and less basic), social and environmental, often in ways that state and market hitherto cannot, or have not, managed to do. Some of the reasons stem from the community realm being one of few spaces where certain needs can be met, that community initiatives are not guided by statutory responsibilities or profit interest, and that, again, community initiatives have a greater ability to answer to context-specific needs than do mainstream waste management actors.

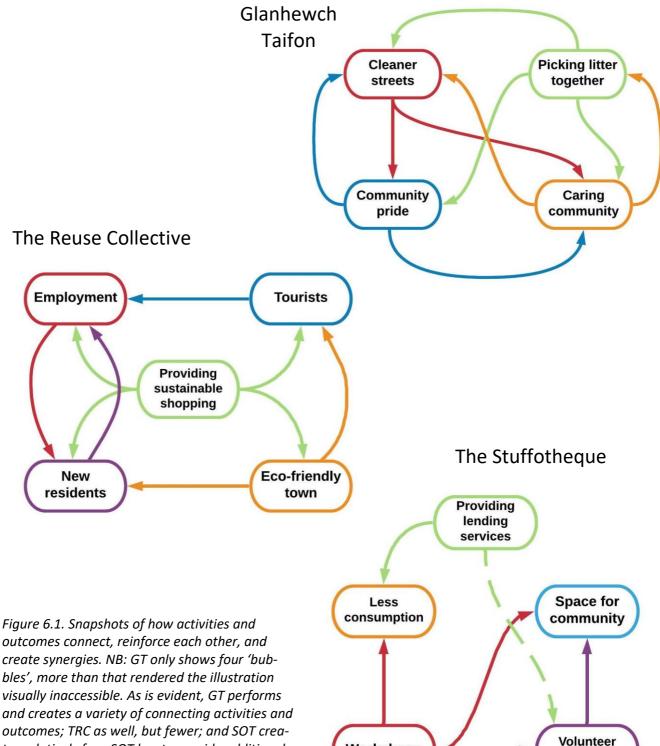
6.1.3 Synergies in community-based need-meeting

So far in this section, the three groups have received very little comparative examination. Context-specificity and meeting social and environmental needs are two aspects that these groups have in common, thus calling for little comparison. However, there are ways that the groups diverge as well. What emerges when examining needs, activities, and the (actual or hoped) outcomes of these activities, is that there are synergies between them. Especially GT creates a (potential) mishmash of synergistic and reinforcing outcomes; TRC also creates synergies, but fewer; SOT creates the least. Figure 6.1 overleaf exemplifies this utilising a selection of activities and outcomes in each group.

The flowcharts on the next page are snapshots of a complex web that surrounds each group, but they serve to illustrate how certain activities and outcomes connect to each other. While each group indeed undertakes multiple activities, which all have outcomes and meet specific needs, GT only picks litter and cares for green spaces, yet creates the most reinforcing outcomes. The most interesting point that emerges, however, which has already been touched upon, is that SOT – and to a certain extent TRC as well – creates very little space for community through the main service. As was introduced in Chapter 5, SOT's lending service is self-service, i.e. no interaction between borrower and staff/volunteer host is technically needed. The act of borrowing is furthermore over in a very short time, thus creating little space for community. As one of the aims of SOT is to create said space for community, this

led them to start hosting workshops, which are theorised to be moments in which people can meet and activate a sense of community. TRC is in a similar position in that relatively little is done together with multiple others, but their services are all based on interaction between people; they also contribute to an atmosphere in Thornbridge, which

invites to further interaction, activity, and community initiatives; and, as identified, the village



Workshops

and creates a variety of connecting activities and outcomes; TRC as well, but fewer; and SOT creates relatively few. SOT has to provide additional opportunities for community, as community cannot be created through its lending service.

opportunities

already has a relatively strong and active community. As such, the three groups can be understood as inhabiting a spectrum of reinforcing activities and outcomes.

Beyond the specificities and circumstances of each case, what can be said about them is that they further differ in terms of formality. GT is a small, informal group, TRC is a charity with a long history of informality, and SOT is a for-profit enterprise with the aim to expand and become *the* item-lending library. This difference suggests that the more formality that is brought into an organisation, the less is done in common, the less space there is for community and the social, and the fewer reinforcing activities and outcomes are present. This argument will be furthered over the coming sections.

6.1.4 Complexity as a limiting factor

As indicated in Table 6.1, certain needs are challenging or impossible to meet, are not met yet, or a choice has been made to not meet those needs in specific ways or at all. For GT, the needs they set out to meet are such that they do not have control over whether or not they actually succeed – they might clear a street, create a sense of community amongst those who picked that day, and made those participants feel proud of what they had accomplished. However, the long-term effects might be limited:

"Ok we've cleaned a whole load of streets today, and suddenly, for a short term it's nice and tidy, but reality is give it a few hours and it might look more or less the same, which is disheartening." (Louise, GT)

The litter problem, as indicated in Chapter 5, is a complex and systemic issue, one which a community group can only do so much to solve. Similarly, TRC limits the type of wastes they accept – if it cannot be reused, composted or sold for scrap it is turned away. This is a choice, but one that is driven by monetary necessity, which stems from the complexity in the items and materials that exist. SOT chooses to offer only 70 items and charges a borrowing fee for these (one which is, in comparison to previous SOT models, higher). This excludes certain needs, and might exclude those who cannot afford the fees. However, as Chapter 5 highlighted, previous SOT models struggled with money, quality, upkeep, and storage, and SOT staff and founders emphasise the need for a streamlined organisation in the face of expansion and upscaling.

There is much potential in the community realm, but there are also limits to what can be achieved here: the complexity of modern wastes that is created through globalised capitalism cannot always be matched. While CWPs rarely claim to be able to completely solve complex waste issues, scrutinising the action here, as well as the potential, highlights that while waste services are presently needed, there is also a *need to not need them*:

"We all say, we like doing it, we enjoy doing it, it's quite rewarding, but we don't want to be doing it, we want to be doing something else [...], so at the core of all of it, we want to do ourselves out of a job." (Rose, GT)

As such, much of the work that community-based groups do revolves not only around meeting needs, but also about instigating change, locally and beyond, so that the need-meeting becomes easier or is no longer needed. This will be explored further in next section.

6.1.5 Meeting needs – summary

In this section, CWPs have been examined for which needs they meet and do not meet, as well as how they do this. To sum up:

- Needs are both waste-related and social. All three groups attempt to meet needs that relate to waste – its problematic presence on streets, its squandering in areas with scarce waste services, and its creation through consumption. They also attempt to meet social needs.
- Context emerges as a determinant for action. The setting will determine which needs are experienced as well as which needs go unmet by market and state, and as such, which needs are acted upon by community initiatives – for the cases these are streets that keep getting littered, a rural setting lacking waste services, and a dense and expensive city.
- **Community can reproduce itself.** State and market cannot, to the extent that a community can, meet any needs for community and related social needs, these can only support and remove obstacles. A space or moment for *doing in common* is

seemingly a prerequisite for community creation, as becomes evident through the three cases.

- The environment is a valid need-holder. CWPs force the conventional understanding of commoning to be expanded. Non-human others such as the environment, as well as the extralocal, are firmly centred as valid key need-holders in community-based waste action.
- Synergies arise from community action. Community-based waste action creates synergies and thus meet multiple needs simultaneously. Increasing formality seemingly decreases these synergies.
- Waste is complex. As has been indicated in previous chapters, waste is created through complex, globalised systems with a multitude of materials and production techniques. These cannot always be matched in the community realm or through informal action, and thus pose a limit to what is possible to achieve.
- Commons-based need-meeting is practiced in CWPs. CWPs meet needs that state and market cannot meet or that these only meet insufficiently and/or unsustainably. They do so in a highly contextualised fashion. Applying a commoning framework to waste further highlights that the environment can be a need-holder.

6.2 Bottom-up

Bottom-up was identified as the second feature of commoning in Section 2.3. As for *meeting a need*, *bottom-up* was given a set of questions to aid analysis:

- What comes from/remains on the bottom?
 - Specifically, this question looks to decision-making, activities (practical undertakings), and initiation (the start-up).
- What is advanced upwards and how?

Table 6.2 below summarises what remains amongst the grassroots, and what is advanced, in the three cases. Examining how the groups are organised, what activities they undertake and

how, highlights that the three cases are, to varying degrees, organising *on the bottom* as well as attempting to advance certain objectives *upwards*.

	What comes from/remains on the bottom?	What is advanced upwards and how?
GT	Initiation; core group decision-making; litter-picking activities	Challenging norms around litter; raising public awareness; engaging city waste team and local councillors
TRC	Initiation; open, elected board + community consultation; volunteering tasks, workshops	Challenging norms around thrift; educating local public around waste; modelling small scale waste management; organisation is formalising
SOT	Initiation; community voting mechanisms; volunteering opportunities	Challenging norms around ownership; raising awareness on borrowing; modelling shared over private property; organisation is formalised

Table 6.2. Bottom-up in CWPs. What remains on the bottom and what is advanced.

The table above indicates that there are similarities in what these groups do, for example that each initiative emerged amongst the grassroots and each group challenges norms around our relationship to waste and objects. Emerging differences revolve mainly around whether or not groups remain on the bottom, or if they have detached themselves through processes of formalisation. The coming pages focus on these similarities and differences – how the bottom emerges as a nuanced space for community waste projects, what is advanced and how, and as well as benefits of closeness to context.

6.2.1 The bottom as a nuanced and created space

The bottom is an important space in practicing commoning. For an initiative to be considered a commoning initiative, aspects such as setup, decision-making and whatever is undertaken, provided or performed (such as picking litter) must remain amongst those whose needs are attempted to be met (Esteva, 2014).

The aspects above remain on the bottom to varying degrees in the three cases. As mentioned, the initiative to create each group came from those who felt or saw a need for themselves and others, including the environment, i.e. it did not emanate from an LA or for-

profit company. Where the groups start to diverge is how they are organised in the present – years after they were set up. For an informal initiative, such as GT, it is evidently possible to retain decision-making and activities amongst the grassroots. The more formal TRC and SOT, however, see decision-making, activities, and services increasingly detaching from the bottom. This suggests that the more formal structures are put in, the fewer decisions and activities are open to those who these initiatives are for. As the table on the previous page indicates, TRC and SOT have attempted to create moments in which the community can get involved – these moments are for example the possibility for SOT members to request and vote for new items, as well as volunteering opportunities in both groups. Similarly to what emerged in the previous section on needs, these two projects find themselves having to forcibly create space for the community to take part, as in, the participation of the community does not just 'happen' through joint activities or an organising core that is open to anyone. Even so, compared to mainstream waste management and prevention, all groups are found in a space that is closer to the bottom than the 'top'.

The examination of these groups shows that CWPs can, and do, emanate, engage with and, to differing extents, remain on the bottom. What further emerges is that *the bottom* is a nuanced space, and is furthermore a space with a spectrum – it can be local and open to anyone, as it is in GT; it can be local, but open only to those who are elected or for certain tasks, as it is in TRC; and it can be semi-local and open only for certain tasks, as it is in SOT. The latter arguably has detached itself the most from the bottom: if bottom-up was considered as the only commoning feature, The Stuffotheque would likely be understood as practising very little commoning. However, paying attention to formalisation highlights how those who are more formal – TRC and SOT – can, and indeed do, attempt to *create* spaces and moments to (at least partially) make up for what is lost through the process of departing from the informal.

6.2.2 Upwards and outwards

Up, defined as the direction for efforts to instigate change, is identified as a crucial political aspect of commoning – it signifies that there is an unsustainability or an injustice present in how mainstream service or needs provision is organised, and that this needs rectifying. In other words, a challenge to the status quo needs to be issued (Chatterton et al., 2013), and this does not happen by solely remaining in place. Simultaneously, as explained, an

organisation completely detaching from the bottom risks losing the connection and closeness to context and local needs. What ideally should be advanced, then, are those aspects and objectives that will mount a challenge to the mainstream, while allowing the project to remain amongst those who experience the needs that are being met.

All three groups progress and advance certain activities and objectives upwards, in efforts to instigate change more widely as well as on a higher level, as none of these groups believe that the issues they battle with every day will be solved by staying put and remaining silent. All three groups display some kind of challenge to norms and hegemonic ideas. GT and TRC mainly challenge ideas around waste, material, and do so by engaging with other people's discards. SOT, on the other hand, challenges norms around property and the status that accompanies private ownership, by attempting to make borrowing better than buying. Moreover, the groups also raise public and political awareness of their causes, doing so through having a visible presence, and by engaging in conversations with passers-by, Local Authorities, local businesses, schools, on social media, and more. Lastly, both SOT and TRC showcase that a different way of doing things is possible. The direction of these outreach activities, however, is not always 'just' up. Challenging norms, raising public awareness, and modelling alternatives are moves that are not only potentially directionally upwards, but also outwards. While this speaks to the *collective* action aspects of commoning (Chatterton et al., 2013), this is not always the theoretical foundation behind what the groups do. While organising collectively themselves, at least GT and TRC more or less subscribe to behaviourbased theories of change, where they encourage individuals to change what they do with their wastes. As such, up, e.g. lobbying local politicians, is also complemented by out, i.e. attempting to create change by influencing the local community, individuals and other groups.

A form of *upwards* that is not considered commoning, but which is highly pertinent to the cases under study, is when an entity itself is moved up along a trajectory, through for example upscaling and formalising. Upscaling is often viewed as a legitimate and sometimes needed diffusion target in e.g. grassroots innovation (Seyfang & Smith, 2007), and while it can indeed deliver sustainability gains and grant an organisation a higher chance of reaching certain objectives, it is not entirely compatible with commoning. TRC and SOT are both formalised – TRC is a charity with an increased focus on profitability; SOT is a for-profit company that is in a process of significant upscaling, where they aim to become *the* itemlending library in the UK. SOT undertook very intentional efforts to upscale – the reasons for this are captured by Andrea:

"I mean, the kind of example we always use was like, you can't scale it up if you're being asked to order carpet cleaner tablets, because they've run out. Like if you're in there, dealing with those really tiny day-to-day stuff, how can you grow the business?" (Andrea, SOT)

Following this reasoning, the question arises of whether or not bottom-up is always desirable or even possible. From the point of view that SOT, or any other initiative, could have larger impacts if they scaled up, remaining on the bottom might not be ideal. However, this is if the claim is true that this larger impact is indeed possible, and that it embodies more potential for sustainability and social justice than does remaining firmly rooted amongst those whose needs are attempted to be met. While commoning could be interpreted as a form of idealism, it is also a lens that highlights alterity. From this point of view, the question is perhaps less whether or not something qualifies as bottom-up, but rather to what extent, suggesting that it is indeed more a question of a spectrum, not a dichotomy. Furthermore, the attempts to combine commoning and waste emphasise that only local action is not desirable, as waste connects localities to each other through processes of extraction, production, use, discarding, and end-of-life management, where choices downstream will have upstream effects. Waste also mounts a complex challenge, one which seemingly urges certain initiatives to match this complexity, rather than remain on the bottom and allow capitalist-informed waste management to deal with capitalist waste. This thus further anchors the suggestion from the previous section that bottom-up is a nuanced space, and that it is seemingly possible to inhabit it on a spectrum and as a hybrid, rather than on the bottom or not.

6.2.3 Contextual counterweights

Context has been identified as a key factor for community action – the importance of context for bottom-up is that those on the bottom will have the most immediate connection to the experience of that context. They will know what they need and can more likely see what is needed in their locality, compared to a further removed entity. They will furthermore be closer to the effects of the presence or absence of service provision. GT, for example, embody and showcase a very different understanding of their area's litter problem, than do most mainstream views on litter. They see the litter as an effect of historical and current waste management strategies and practices, as well as a lack of community and pride. They propose to work *with* litterers and sources of litter, and attempt to prevent the litter from happening, instead of enforcing against it once it is already there. Proximity to context thus grants a position that enables a more nuanced and detailed understanding compared to what is available to those who are further from the problem. One respondent also explains:

"[A benefit of a community picking litter] probably is just local people doing it, because you'll get more engagement, rather than you know, if it's the council, it feels like it's forcing people. If it's actually people in the area, then, yeah I think you'll get more people, more positivity. People are quite cynical about initiatives that come from the government or local government." (Mal, GT)

Organising on the bottom and attempting to instigate change upwards and outwards are furthermore important counterweights to standard waste management. In mainstream strategies, the local is not only not properly understood, it is also often considered "a site of policy implementation, rather than innovation" (Davies, 2007, p. 69). However, community waste projects steer the directionality of action around and show that the local is clearly a space for innovation, as well as service provision. The 'top' then rather becomes a target for calls to action, which are context-informed, from the bottom.

6.2.4 Bottom-up – summary

This section has examined how community projects organise on the bottom, and what is advanced upwards. To sum up:

- It is challenging to remain on the bottom. The cases under study were all initiated amongst the grassroots, but dealing with complexity and having the desire to have a larger impact has meant that remaining on the bottom is challenging.
- **The bottom can be created.** Becoming formal seemingly leads to detaching from the bottom; however groups believe in the importance of involving community, and thus

attempt to create a space for local, direct participation, through for example voting, consultations, and volunteer opportunities.

- CWPs attempt to instigate change. All groups organise against an unsustainable and unjust status quo – litter, waste, consumerism – and only providing a service is not seen as an option: groups also engage in a variety of change-making activities, such as challenging norms, education, political awareness and modelling alternatives, targeting both individuals, communities and LAs. As such, groups advance some of their objective upwards and outwards.
- Some CWPs formalise to advance their objectives. Certain objectives, such as having
 a 'big' impact, are challenging to meet under informal and small-scale conditions.
 Some groups thus prefer to formalise and detach in order to reach such objectives.
 This suggests that bottom-up could be interpreted as a nuanced spectrum, rather than
 an absolute state.
- Context is a crucial benefit of CWPs. Remaining on the bottom, however, means
 proximity to context, and thus insight into contextual needs, something e.g. LAs likely
 do not have to the same extent. CWPs can flip the directionality of action, from being
 a policy implementation site, to a source of contextualised understanding, which can
 be advanced upwards and outwards.
- Bottom-up organising is practiced in CWPs to a certain extent. In conclusion, CWPs can organise on the bottom in different ways, but show that something like capitalist waste might require a different approach than what commoning normally prescribes

 formalising emerges as a sometimes necessary tool in order to deal with complex wastes.

6.3 Cooperation

The commoning framework outlined in Section 2.4 introduced two questions to ask of an initiative to determine to what extent they practice commons-based cooperation:

- What kind of cooperation is practiced?
 - This question follows Fournier's (2013) conceptualisation of commonsorganising divided into organising *in, for* and *of* the common.

- How is cooperation performed?
 - This question scrutinises specific elements of cooperation, for example working towards a shared goal; communicating with one another; applying a fair decision-making structure; organising in a hierarchically flat manner participating voluntarily; and cooperating with external entities.

As the Table 6.3 overleaf indicates, the three cases perform cooperation to differing extents and in different ways. What emerges through examining community-based action on waste through the lens of cooperation is that it is really joint production that is reproductive of community; that the presence of more structures in an organisation removes moments and aspects of cooperation; and that cooperation needs to be more complex than 'working together'. These are all covered over the coming pages.

	GT	TRC	SOT
What kind of	Of the common – joint production of	Of the common – fragmented joint	In common – allocation (borrowing) of
cooperation is	clean streets; to a certain extent for the	production of a service	resources (things) held in common
practiced?	common – joint use of benefit of clean streets		
How is	Cooperation forms the basis of GT	Cooperation is partially performed;	Cooperation is performed only to a certain
cooperation		fragmented	extent
performed?			
Shared goals	Yes – clean street and community	Yes – saving waste	Partly – org. goal is to expand; borrowers'
			goal is access to things; everyone's goal is
			env. + soc. sustainability
Communication	Partly – comm's on Twitter, excl. those	Partly – staff and community included in	Partly – intra-org. comm'; borrowers/public
	not online + mainly white	certain aspects, not all	mainly one way communication
Fair decision-	Yes – org. core open to everyone	Partly – board and CEO take most	Partly – org. run as a business; borrowers can
making		decisions; community and staff sometimes involved	vote
Non-hierarchical	Yes – role-divided, but no leader	No – roles and hierarchies present	No – roles and hierarchies present
Voluntary	Yes – only volunteers	Partly – both employment and	Partly – both employment and volunteering
participation		volunteering	
External	Yes – with LAs, other groups, schools	Yes – other groups, schools	Partly – local Transition Town, businesses
cooperation			

Table 6.3. Cooperation in CWPs. Colours indicate level of engagement with commoning feature: green – engagement; yellow – partial engagement, red – no or little engagement. This suggests that SOT is less cooperative than the others, TRC is in the middle, and GT is almost entirely cooperative.

6.3.1 Cooperation as joint production and use

Cooperation is here typified through Fournier's (2013) categories of organising *in common*, *for the common* and *of the common*. *In common* is understood as allocating e.g. resources from a joint pool – the resources can then be used individually or sold on a market (cf. how modern-day commons are understood, e.g. fisheries). *For the common* means to use together, e.g. use a building or a blueberry pie together. *Of the common* lastly means to produce or create jointly. In the first category, nothing is actually undertaken jointly – only the distribution is performed according to previously established rules. In the latter two, there is always a form of joint activity, i.e. collaboration in action.

Cooperation is variedly practiced here: GT organises *of* and *for* the common; TRC *of the* common, but in a fragmented fashion; SOT *in* common, as borrowing could be interpreted as a form of allocation of resources to individuals. For GT, joint litter-picking is an act of cooperation: it relies on a coordinated effort, where participants agree to do the same activity for the same goal – clean streets. The joint *production* is here understood as the creation of an end result – the end result is clean streets; the creation is picking litter collectively. GT can furthermore be understood to (at least partially) organise *for* the common as well, as the *fruit* of what has been produced is also *used jointly* – the group sometimes continues beyond their litter-picks into cafés, pubs, or parks. While these are not necessarily that which has been directly cared for, it could be argued that GT not only produces clean streets, but also a friendlier community, conviviality in neighbourhoods, or simply a group of friends. These can be interpreted as used collectively, and in this sense, GT also practices *for the common* cooperation.

TRC and SOT, being more formal than GT, do not exhibit the same degree of cooperation. TRC produces a service: the services and activities are, however, organised, planned, and undertaken by smaller groups within TRC – either the board of trustees, paid staff, volunteers, or a combination of these groups. *The common* becomes the service that is open to everyone in the community; the creation of it is undertaken by one or more of the above groups. In other words, while the common can be enjoyed by the community, the production of that common is closed off in a satellite-like fashion. So while TRC can be understood to organise *of the common*, this organisation is fragmented. SOT, on the other hand, mainly organises *in common*, i.e. allocate something from a joint pool. The joint pool is

221

here the collection of borrowable items, the allocation is done through memberships, payment, bookings, and collection from the self-service kiosk.

Organising for the common and of the common are thought to be able to reproduce the social, i.e. to create a space, or the preconditions, for community to be produced or reproduced (Fournier, 2013). The fact that the social or community can only be produced in two of the three types of cooperation comes from these being performed *jointly* – without any kind of *doing together*, community will not be created. The groups represent this in a complementary way – GT does nigh on everything together; TRC does certain things together; and SOT has to intentionally create opportunities for its volunteers and users to be together, in order to have an effect on community cohesion and creation. What emerges as an interesting point of divergence is the fact that TRC does not attempt to *create* community so much as support it and provide for it. As identified in Chapter 5, Thornbridge already has a strong community, and there is thus less incentive and even need for TRC to be the space or conduit for it. One respondent commented on how community is created in Thornbridge:

"But [Thornbridge] is particularly special in that there's a big community that all work together. And once you have a culture like that, it perpetuates itself. People come here, because they know that's what they're going to find, and they want it to be like that." (Kat, TRC)

Without being isolated to TRC, this aligns with how the social is thought to reproduce in commons-organising – a 'community culture' perpetuating itself, regardless of if that is already there, is created automatically through joint activities, or produced by intentionally making space for *doing together*. Here, waste figures only in the background – one of the strengths of community and commoning, when viewed through cooperation, is the possibility to go beyond mere service provision and generate benefits that far exceed waste tonnage and the measurable.

6.3.2 The presence of structures

Evidently, TRC and SOT practice less cooperation than does GT. This is a recurring theme, and likely, again, stems from the more formal position these two inhabit. The presence of structures in these organisations is likely what leads to fewer moments of collaboration –

these structures ensure, for example, that employees have clear roles and responsibilities and that they have a manager who can support and steer them. Decisions are organised as taken by a limited few according to those responsibilities. Only those who make those decisions are thoroughly involved in communication, and so on.

These structures are in place for the same reasons highlighted in Section 6.2 – to ensure financial survival, longevity, and larger impacts, and to deal with the complexity of the incumbent system, as well as capitalist waste and products. One TRC respondent said:

"[TRC] needs to be moved a bit more into the [21st] century, the way they kind of organise sort of things like their policies and procedures and their staffing. [...] the board is accountable for making sure that people are properly treated according to the law of the country you're in, and the charity commission's requirements, that you've got all the financial controls right, because you need to make sure that everybody is confident, that financial systems are safe and accurate, and some of the human resources." (Kat, TRC)

However, simultaneously to this, cooperation and joint production are removed, and since these organisations still want to reproduce the social, they attempt to put back what they took out. One SOT respondent explains the role of the volunteer:

"So as a volunteer, you're not, you don't spend your four hours, you're not cleaning a carpet cleaner, you're talking to people, you're sharing skills, you're passing on knowledge, [...] So that's why we're moving towards as much as possible, the volunteer roles that do exist are there to be really impactful for the individual and for the community as opposed to critical to providing things to borrow." (Elisa, SOT)

In this way, SOT seemingly recreates small moments of cooperation and spaces that can reproduce the social, however not to the extent that they were removed. As Kat hints above, having these structures ensures security and stability in the face of a complex world, which ultimately means increased chances of survival and the continued ability to provide for needs in their localities.

6.3.3 Local and translocal commons ecologies

Commons ecologies are sets of local or regional relations between commons, or between commons and others, which aid in sustaining each and everyone (De Angelis, 2017). Translocal ecologies, on the other hand, are more often upheld through social media, e.g. Twitter or Facebook, and enable groups to reach increased mass on a regional, national, or international level, i.e. link up to become a social movement. The ecologies of each case have not been studied in depth, but relations to other groups or initiatives, in either dimension, were queried in interviews. What emerged is that each group is, to varying degrees, connected to other local, large or small, market or non-market entities, sometimes officially, sometimes through certain individuals.

Glanhewch Taifon works with multiple other litter-picking groups in the area, as well as with pubs and shops, schools, community centres, and local politicians as well as artists. They are also highly active on especially Twitter, linking up with multiple litter-picking groups across the country. These connections facilitate GT's actions, make them more visible, make them reach more people, and draw in more pickers. The Casdwr city council and its waste team are furthermore seen as a crucial ally, where the group can support the waste team and vice versa. Glanhewch Taifon does not practice any form of competition with external entities – other groups, businesses, other community entities, the city council are all approached and viewed as allies, and as initiatives and entities to collaborate with.

The Reuse Collective cooperates with and supports other groups locally, e.g. those focused on food and food growing, a local anti-plastics group, local and regional schools, as well as a myriad of local and regional artists and crafters. TRC also functions as a source of inspiration, that shares their experience and know-how freely with other individuals, groups and communities, and in this way, links up beyond the local. While TRC has amassed enough mass to stand on its own, the local linkages they build and cultivate have facilitated, and will facilitate, TRC in reaching their objectives. One effect of nurturing this local ecology could be that certain local relations that are filled with animosity are neutralised and the rift they have created begin to heal, not to mention a potential increase in acceptance, followed by a potential uptake in use of the waste services offered. Cooperating with other groups, locally and translocally, indicates that TRC does not compete with any external entity, and, as such, practices commons-based, external cooperation. The Stuffotheque is the case with the seemingly fewest local and trans-local connections. In Glasney, they do uphold relations to the local Transition Town group, as well as organise various members of the community to share their skills in mending meet-ups, repair cafes and other workshops. As can be theorised by their increased levels of formality and their shift from community organisation to social enterprise to for-profit company, their local and trans-local linkages perhaps play a lesser role for the organisation itself: collaboration with market entities, such as Bosch or IKEA, are seen as more strongly enabling them to reach their objectives.

These local and translocal connections are an important part of creating more space and increased strength for and of alternatives, while simultaneously mimicking how more localised waste and material flows could look in the future. As identified by groups, knowing that there are others that care about the same thing is powerful and comforting. These linkages are examples of cooperation, here external, and seemingly play an important role in facilitating community waste projects in reaching their objectives. External cooperation also emerges as an important counterweight to capitalist external relations, which more often build on competition.

6.3.4 From working together to inclusive cooperation

Cooperation understood only as *working together* cannot account for the complexity involved; *working together* can furthermore be practiced anywhere, even in a capitalist setting. Thus, working together in a commons takes a different form compared to working together in a firm. Cooperation in a commons specifically involves sharing goals, practicing open and inclusive communication, making decisions jointly and fairly, having no hierarchy amongst members, relying on non-coercive forms of participation, as well as having no competitive relations to external entities or individuals.

Table 6.3 on p. 216 outlines which aspects of commons-based cooperation are practiced in the three cases. As is evident by this table, working together is complex and nuanced – GT scores a 'yes' on almost all aspects; TRC sees a combination; SOT does not fully practice any cooperative aspects, which is in line with their relative levels of formalisation. Practicing a variety of cooperative elements emerges as important mainly for two reasons: cooperation, not competition, can reproduce the social (which has already been covered), and non-cooperation casts doubt on an initiative's ability to fairly represent those whose

needs they are trying to meet. Cooperation means to jointly manage that which is shared – if those who are 'in a community' are not included in decision-making, communicated with, involved in joint activities, and treated fairly, then the reproduction of the social risks becoming heavily skewed and problematic. While none of the groups reproduce particularly problematic forms of community, there is an awareness that their make-up is relatively homogenous:

"So it tends to be a lot of white people, borderline middle-class, you know. But yeah, we've spoken about how we get maybe people speaking different languages involved." (Louise, GT)

The danger of reproducing an unequal, or narrow version of, community is echoed in critical community approaches (Aiken et al., 2017) – the risks are not only centred on ethnicity, but also for example gender, community status, and sociodemographics. In the case of SOT, for example, the cost of borrowing is seen by some as potentially excluding people who cannot afford this. While the community is invited to vote for things, they are not invited to vote for cost – costs are determined by financial needs, rather than community members' needs. As such, it is true that cooperation remains an important counterweight to the competition that is favoured in capitalist relations, but practicing commons-based cooperation, i.e. more complex and intricate forms, is important also for other reasons – meaning not only *if*, but also *how*, the social is reproduced.

6.3.5 Cooperation – summary

The three cases have now been examined for how and to what extent they practice commonsbased cooperation. To sum up:

 Joint doing can reproduce the social. Through engaging in collaboration in action, meaning production or use of the common, for example cleaning streets together, the social can be reproduced. If no joint activities are undertaken, there is no space for community – these could be partially recreated, through for example volunteering and workshops.

- Structures can remove moments of cooperation. For financial stability, increased ability to deal with complexity, and higher chance of delivering 'bigger' impacts, groups tend to favour formalisation. This often comes with inserting structures into how the organisation works, which can end up removing moments and aspects of cooperation, e.g. joint and fair decision-making.
- **CWPs practice external cooperation.** Collaborating with external entities emerges as a key tool for CWPs, in that it supports reach and objectives. Cooperating with external entities is also a key counterweight to capitalist firms.
- Inclusive cooperation is crucial. If cooperation is not performed through a variety of elements, specifically taking inclusivity into account, there is a risk that the kind of community that is reproduced is not representative. The needs represented will inform what is undertaken and reproduced, meaning if certain needs and perspectives are excluded, what is created will thus be a skewed version of community.
- There are multiple benefits of cooperation. While cooperation is an antithesis to competition, its benefits do not purely lie in the realm of waste tonnage and strategies, but also in *if* and *how* the social is reproduced.
- **Commons-based cooperation is practiced by some CWPs.** In conclusion, cooperation is important for community action on waste, since it plays a role both for waste-related objectives, as well as social needs. Attention to waste, however, suggests that commoning might be difficult to practice on capitalist wastes to its fullest extent. Again, recreating spaces for cooperation emerges as a possible reconceptualisation of commons-based cooperation around waste.

6.4 Outside the market

The fourth feature of commoning is *outside the market*. In order to engage with this feature, I examine the three groups based on the set of questions outlined in Section 2.4:

- Are there any signs of marketisation?
 - This is engaged with through monetisation (understood as engagement with money), commodification (selling something), and market logics (cost efficiency and profit)

- If yes, are there any modulating factors?
 - Highlighting how groups, despite operating on the market, might experience or exhibit so-called modulating factors, i.e. something that nuances their position on the market, such as being non-profit
- Are free practices performed or promoted?
 - Free practices is kept open to anything the groups do that is free, but could include for example gifting, lending, or free services

Table 6.4 below summarises how the cases engage in market processes, if they exhibit modulating features and if they perform or promote something 'free'. Comparing these community waste projects highlights how proximity to, and high ambition in dealing with, capitalist waste and things seemingly leads to engagement in market processes; that it is challenging to organise community initiatives in a system that favours profit; and that the *experience* of non-capitalism might trump the fact that an organisation is marketised. These will be covered over the coming pages.

	GT	TRC	SOT
Signs of	Very little	Yes, but modulated	Yes
marketisation		through e.g. non-profit	
Monetisation	Partly – accepts	Yes – org. is run through	Yes – money involved in
	donations, no other	monetary means; small	most aspects; some
	engagement	part run on volunteers	voluntary action
Commodification	No.	Yes – sells items and	Yes – SOT sells a service
		materials	
Market logics	No.	Partly – non-profit, but	Yes – profit and costs are
		guided by profitability	central ideas
Modulating	N/A.	Yes – non-profit, stock is	Partly – volunteers,
factors		donated, volunteers	mission lock, 'profit-with-
			a-purpose'
Free practices	Yes – everything GT	Yes – most waste services	Partly – free workshops
	does is free	are free	

Table 6.4. Market relations in CWPs. Marketisation, modulating factors, and free practices. . Colours indicate level of engagement with commoning feature: green – engagement; **Qeleopoinpareied stagdogemade**; first, howeviet le engagement This iditions, solget SQT gisamptieing marketised than the others, and that GT performs most of its activities outside the market outside the market is difficult, even a community-based waster initiative. As such, these groups are not held to any impossible standards. This has been said before, but is particularly important for this feature: the point of this research is not to judge these cases based on whether or not they are a commons or commoning initiative, but rather to look at how they are alternative to market-based organisation, utilising commoning features to understand said alterity. The aim is furthermore to understand what kind of potential they embody when they *are* alternative, and when they are not, to understand why.

6.4.1 Capitalist waste and ambitious objectives

There are many challenges to organising a community-based waste initiative. Examining community waste action for marketisation offers an insight into the specific challenges of dealing with capitalist wastes and capitalist products. Table 6.4 indicates that the groups are differently marketised, with SOT again being on the furthest on of the spectrum, where most aspects of their organisation are performed on the market or with market logics. TRC finds itself in the middle by taking part in commodification, but doing so while being non-profit and offering a free waste service. GT, being informal, is the least marketised. From this, one stark point of contrast between the cases emerges: the level of ambition in dealing with capitalist waste. Examining how the groups are marketised suggests that this could be key in understanding the drivers behind formalisation in general, and marketisation in particular. This has been hinted at before, but will here receive further attention.

Chapter 2 identified capitalist waste as complex combinations of multitudes of materials with different spatial and temporal origins. Capitalist products (such as the ones SOT lends out) are the same, only at a different point in the thing's/waste's life. The community waste projects here suggest that the level of an organisation's ambition to deal with such capitalist waste will decide how much that organisation formalises in order to match the complexity of that waste. For example, if the ambition is to gather people from the community to voluntarily pick litter once a month, where the litter is ultimately managed by LA staff and disassembled in industrial waste plants, there is little need for being formal and thus engage in market processes. However, if the ambition is to have large impacts on consumerism, become *the* item-lending library, and make profits (albeit slow) for social investors, then funding needs to be secured for employees, who are needed to ensure scalability, which is needed to have the kind of large impacts that SOT strives for. One SOT respondent explains the challenges:

"You're so limited, if you don't kind of start to play a little bit by rules of like, you know, going for some funding, like, you know, finding money to pay yourselves. You can't ever progress. And it wasn't... this needed to be something that was done to its fullest, otherwise it wasn't gonna happen." (Sally, SOT)

As this quote from Sally indicates, the larger the ambition, the more time and funds are needed to realise that ambition. On the other hand, examining GT for signs of marketisation highlights how an informal project dealing with waste could and need to organise in order to have an impact. A GT respondent explains:

"So we've never really had money to do stuff, and the, which is fine, because you don't always need money, you can do exchanges of work or something." (Rose, GT)

While GT demonstrates that it is possible to organise a CWP without much involvement of money, their level of ambition is arguably not equal to TRC or SOT. Being small and informal means that there are clear boundaries to what can be achieved. Litter can be picked, but it cannot be safely dealt with unless a heavily formalised entity, such as Casdwr city council, steps in to handle the waste for the community. GT's objectives, however, are not to operate a recycling plant, but to remove the litter from their streets – if it would be the former, a much higher level of formalisation, thus likely marketisation, would be needed.

Engagement with capitalist wastes and products, and the level of ambition of dealing with such wastes, thus seemingly leads to the need to formalise and thus perform an increasing proportion of activities and services *on* the market. Other factors do contribute to an organisation's marketisation level, e.g. if the ambition is to create formal employment or if there is no ideological or value commitment to remaining informal or community-based. Remaining informal is seemingly challenging when dealing with something like waste – the very nature of capitalist waste and things is that they were once intended to be sold under capitalist market conditions. While certainly possible to engage with such wastes and things under non-formalised conditions, for example through gifting and swapping, the ability to achieve ambitious objectives, such as expanding to every town in the UK or to model a flourishing zero waste town, is diminished.

6.4.2 The challenge of organising community under capitalism

Beyond engaging with capitalist waste, organising a community initiative is challenging in and of itself. While community projects can be organised in a variety of ways, what many have in common is that they organise *differently* compared to capitalist entities, i.e. they are informal, non-profit, cooperatives, do what is not profitable, do more than what is required, and so on. They also often fill a gap in services, i.e. do that which is perhaps not profitable for a private firm or that which is too costly for a Local Authority. Simultaneously, the financial and organisational pressures are often great, which likely stems from a nuanced or nonadherence to capitalist rules and picking up what gets left behind by mainstream market actors, while still being influenced by e.g. cost efficiency logic.

The environment and context that most initiatives find themselves in is often unforgiving. Taking The Reuse Collective as an example – to be able to provide the waste service that TRC does, it has to generate an income. Many parts of the organisation need a constant cash flow – the main one being staff, as well as for example electricity, running the collection truck, organising workshops, and so on. The main income stream is generated by the sales of items and materials at the yard, as well as grant funding, selling metal scrap, and taking in certain types of waste, for example garden waste (50p/bag) and whole, second-hand bathroom whiteware. In this way, most of TRC's service and goods provisions are monetised - and this is essential to its survival. TRC, along with many other reuse hubs, also has the ambition not only to 'save waste', but also to create employment. While possible to pay in kind, employment is almost always formal, relies on contractual and legal obligations, and is salaried with monetary means. Once monetary means are needed for salaries, a project needs to be monetised, which could be achieved through for example donations, grant funding, or sales. As such, since the original objective of TRC was 'to create jobs out of people's waste' (Nathan, TRC), there was never a question of whether or not to monetise – this was built into the very foundation of TRC.

The waste services that TRC provides would likely be possible to undertake at least partially outside the market. However, doing so would mean either relying on free labour, free land, free services and free access to items and materials (through gifting), which would be challenging due to for example the ebbing and flowing capacity and availability of volunteers; or it would be entirely grant-funded, which would be challenging due to the unavailability, competitiveness, and complexity of grants. Especially the latter is a source of

231

pressure and worry for many community initiatives, echoed by both case groups and survey respondents. One SOT respondent explains:

"You want core investment, you want like unrestricted funding, to do your job, to build the organisation you need to build, that isn't tied to other people's outcomes. And that's the trouble with grants, that you end up doing things you otherwise wouldn't have done, and investing loads of resources even in getting other grants, even getting the money in the first place. Which is why I don't particularly like them. It's free money, but it comes with loads of strings attached." (Elisa, SOT)

In the face of these pressures, SOT decided to transition from a social enterprise to a forprofit company, which takes social investment, i.e. the pressure of funding forced SOT to formalise further. The pressures of funding have also been identified elsewhere (e.g. Curran & Williams, 2010), with some making such calls for reorienting activities to mimic capitalist entities and to start engaging in sales (e.g. CIWM, 2016). Evidently, this does work for those who have something to sell, e.g. TRC and SOT, but it is arguably nigh on impossible for a group like GT, which does not perform a saleable service at all.

6.4.3 The experience of non-capitalism

While the more formal initiatives in this research indicate that capitalist logics figure or dominate even within the community space, they still embody a form of non-capitalism. They do so through organising waste in ways that are not first and foremost profitable, and which emphasise the social benefits that arise through community action. For members, users, volunteers, and organisers, the non-capitalist character of these initiatives is viewed as a key reason that they use, volunteer at, or work in these initiatives:

"It's a realer thing, it's real, isn't it? It's not... so it ticks all the boxes. It doesn't make me feel conflicted, I don't think I could work in a capitalist business, without feeling... I just couldn't." (Cam, TRC)

Although some community-based waste initiatives do play by market rules, the ideological purity of remaining outside the market is not viewed as important. These initiatives provide

a service and create a space where participants can feel as though they are part of something that is anti-capitalist or which exists beyond capitalism:

"So for me, taking part in such a project is me saying no to mass-consumerism and capitalism in some ways, and also having access to such great tools for such a cheap amount of money is amazing." (Lena, SOT)

"Well, I'm a bit of a weird one. I don't really have a work ethic as such, because I'm not a capitalist. I don't like capitalism. I don't like the way it makes people treat [others] [...] and this was a not-for-profit, I quite liked that idea. I liked the part of society that it sort of represented, and what it stood for." (Adrian, TRC)

Marketisation alone is not synonymous with capitalism, but even projects that inhabit a middle-ground position, where certain aspects of the project are organised in arguably capitalist ways, are *experienced* as non-capitalist. Here, it is the likely the aggregation of objectives, activities and other factors that contribute to an initiative having a non-capitalist *feel*. Interestingly, GT, which is arguably the least formalised and marketised, does not position itself as anti-capitalist, nor did any respondents in interviews. In these community projects, non-capitalism becomes not a set of questions to determine whether or not an initiative is marketised, but rather a pragmatic assemblage of a variety of views, values and practices, which is ultimately experienced as non-capitalist enough.

6.4.4 Outside the market – summary

This section has examined to what extent and how community waste projects are marketised. To sum up:

 High ambition for capitalist wastes leads to formalisation. Capitalist wastes and products are complex, and ambitions to match this complexity often lead community initiatives to formalise and marketise. High ambitions in general seemingly leads to needs for formalisation, in order to raise funds to be able to employ people, who can dedicate time and efforts for reaching said objectives.

- There are still options for the informal. Those initiatives who remain informal and/or small-scale, due to inability or unwillingness (due to e.g. ideology) to formalise, either need to have smaller ambitions, or can collaborate with larger, more formalised entities, such as Local Authorities or other organisations.
- Many CWPs practice pragmatism in the face of pressure. Many community groups find themselves in an unforgiving environment, and in order to survive, groups often take a pragmatic approach or increasingly 'play by the rules'. Some initiatives also have intentional aims of creating employment, something which can only be done under formal conditions and if income is generated.
- The experience of non-capitalism is important. Even if groups apparently cannot remain informal or non-marketised under current conditions or while handling capitalist wastes, their beneficiaries still experience these initiatives as non-capitalist or even as anti-capitalist. This thus casts doubt on the importance of whether or not a community group remains entirely outside the market.
- CWPs experience difficulties organising outside the market. In conclusion, organising
 outside the market is a key feature of commoning, but is seemingly challenging to
 attain when dealing with wastes. This suggests that when the object in focus for a
 commoning initiative is something such as waste, more room needs to be allowed for
 modulated forms of non-market organising.

6.5 Alternative ownership

The fifth and final feature of commoning is that of alternative ownership. In order to understand how ownership is engaged with in community waste projects, the cases are asked one single question, as suggested in Chapter 2:

• What is the ownership form in practice for stuff, services, space, and knowledge?

The cases are examined based on how each case engages with ownership in practice in relation to four categories, which have been chosen because they are all relevant to (almost) all cases – stuff, services, space, and ideas/knowledge. An important point to reiterate before ownership is scrutinised in depth is that *ownership* is, in this research, considered for its literal

meaning, not ownership of process, which is often emphasised as a crucial aspect of community action. This is largely dealt with under *bottom-up*, and not here.

As Table 6.5 below highlights, the four categories are engaged with in disparate ways – the cases under study intentionally and unintentionally view and work with objects and processes as though they were held in common. At the same time, however, certain aspects, such as waste itself, are not the object of alternative ownership forms. This will be covered below, along with how and why waste is challenging to conceptualise as a commons, and how notions of ownership might be broadened as a result.

	GT	TRC	SOT
Stuff	Litter – defies	Items and materials – from	Things – viewed as
	ownerships, council	private to temporarily	belonging to borrowers,
	property once picked	shared to private	owned by organisation
Services	Street cleaning – no	Waste service – open to	Access to things – access is
	users, only	everyone in the community	for members; anyone can
	beneficiaries	and beyond	become a member
Space	Streets and parks –	Yard and shops – legally	Library – publicly owned
	cared for by GT	owned by org	
Knowledge	LP know-how – group	Know-how and inspiration	New SOTs, ILL know-how –
	shares and helps others	 TRC shares freely 	sold as products and
	set up		consultation

Table 6.5. Alternative ownership in CWPs.

6.5.1 Sharing stuff, services, space and knowledge

The original commons were non-owned pieces of land and water, which is today a challenging concept – indeed, most areas of land on this planet, as well as any artefacts and items on that land, are owned by someone. The community waste projects in this research are, as such, not questioned for non-ownership, but rather if they engage in *alternative* ownership processes and forms. Table 6.5 above indicates that they do.

Stuff is arguably a difficult category to apply alternative ownership to. Only SOT manages to practice non-private property forms – and even then, the items that SOT lends out are still owned by the organisation. A reuse hub like TRC, on the other hand, facilitates private ownership of items, since this is the intended state of the products and materials they sell. Furthermore, some of these items are more difficult to *not own* than others – for example

materials that are used to build or repair a house, things that are used up (e.g. compost), and decorations for one's living or working space. In the type of waste initiatives where the *stuff* is only viewed as a problem, and as something having only negative value, as in GT, ownership of said stuff becomes irrelevant – GT simply wants to rid their neighbourhood of these illegal and rogue materials. Waste and products as stuff is thus ostensibly a difficult category to engage with through alternative ownership forms.

A service is difficult to own, as it is merely an action or access to something. As such, the question is rather focused on who has access to the service and how. While it can be argued that what GT does is technically a street-cleansing *service*, this service is performed and not provided, the difference being that it is not given by someone and used by someone else to someone. Instead, everyone can enjoy the outcome. The services that TRC provides are, on the other hand, open to users from the public, although some services have a small cost (such as 50p/bag of garden waste received). SOT's service is guarded by memberships and costs, but memberships are open to everyone who wants to pay. The latter two *view* their services as belonging to the communities they attempt to serve:

"The Reuse Collective is a community organisation in that it's providing facilities for people who live here, it's quite... you know, it's used a lot. It's encouraging people to take on, take more responsibility for their waste, but it's allowing, you know, it's giving them the ability to do that, by providing the facilities, so I think it belongs to the community in as much as it's sited here - you know, it's for the people." (Roy, TRC)

Space as a category of objects that can be owned alternatively takes a different shape compared to stuff and services – the groups here furthermore engage very differently with space compared to each other. TRC owns the land on which they operate their organisation – however, the yard is viewed as the space on which TRC's service to the community is performed. As such, it is not closed off to anyone and it is seen as a prerequisite for offering those services. SOT, on the other hand, exists within a library, i.e. a communal space, which is publicly owned and which has increasingly seen budget cuts and closures in recent years (as noted by respondents). SOT's existence thus supports the continued provision of the library space. Compared to TRC and SOT, GT rather cares for a shared area – by ridding their neighbourhoods of that which disturbs community, GT cares for shared spaces. These are

important to their users because they frame life in Taifon – they reflect how and what Taifon is, how its inhabitants view each other, and they simultaneously act as enabler and destroyer of community spirit, depending on how they appear. By caring for these shared spaces, GT engages with something that falls *outside* private property. Because clean streets are seen as crucial to fostering community, action to make these streets clean can therefore be interpreted as taking care of the common, of the shared, for the benefit of all.

Lastly, sharing knowledge is viewed as an important action in commoning, due to its collaborative nature. In these community waste projects, knowledge is shared freely by those who are content where they are – GT and TRC – but not by SOT, which is in the process of expanding and upscaling. While these efforts are guided partially by wishes to spare others from the years of testing and experimenting that SOT went through, the idea to become a franchise originates in the interest that was showed for SOT from all over the world. Previously, this interest was welcomed openly and knowledge was shared freely, but is now given up only through consulting, in an effort to create an extra income stream for the organisation.

Stuff, services, space and knowledge are, as such, approached differently in different types of projects. Fewer points of comparison emerge for this feature, due to the sometimes disparate actions, wastes, and forms organisation that these groups engage in and with. Comparing across features, this is seemingly the only feature where being formalised does not have an impact on an initiative's ability to engage in something that characterises commoning. This is likely to do with the use of the term *in practice* – many of the objects and processes under scrutiny here are legally owned by the organisations. However, following Gibson-Graham et al. (2016) – anything can be 'commoned' and the *legal* ownership form is considered unimportant. Community waste projects are perhaps particularly favoured by an *in practice* perspective, seeing as waste in itself is challenging to engage with through a commoning lens.

6.5.2 Waste challenges commoning

Even if alternative ownership forms are practiced *in practice*, waste and things generally pose a challenge to the idea of non-private ownership. No one wants to own litter; the items and materials that TRC sells are not for shared or public ownership or use; and the things that SOT lends out are not used in common nor are they owned in common. Ostrom (1990) suggested that objects (or resources) can be divided into four categories based on how they can be used (see Figure 6.2 below). While Ostrom (1990) studied common-pool resources (CPRs), which have been identified as very narrow commons that do not organise of the common or for the common (i.e. doing something together) (Fournier, 2013), this division highlights why it is challenging to apply the feature of alternative ownership to things like waste and items.

		Subtractability of Use		
		High	Low	
Excluding potential beneficiaries	Diffi- cult	Common-pool resources: groundwater basins, lakes, irrigation systems, fisheries, forests, etc.	Public goods: peace and security of a community, national defence, knowledge, fire protection, weather forecasts, etc.	
	Easy	Private goods: food, clothing, automobiles, etc.	Toll goods: theatres, private clubs, day-care centres	

Figure 6.2. Objects, access and ownership. High subtractability of use means that if someone wears a dress, someone else cannot wear that dress at the same time. Difficulty excluding someone from using a good means that it can be termed a CPR or a public good (Ostrom, 1990, p. 32; Ostrom 2009).

Waste, items and materials generally sit in the lower-left corner, i.e. *private goods*, where the difficulty of excluding users is low, meaning it is easy to keep someone from accessing these goods. An example here is if a TRC user buys second-hand blender, that blender legally belongs to that person and can normally not be accessed by anyone else. Private goods are also high in terms of subtractability of use. Using the same example, if the blender buyer uses their blender, no one else can use it at the same time. Items and materials that often become waste, and which are the object of community-based waste action, are rarely intended for shared use and ownership, nor are they frequently used and owned jointly.

Beyond being the by-products of private goods, waste further challenges notions of commoning on account of being a negative value as well as stirring emotions. Chapter 5 highlighted how people often have negative perspectives on waste – it is where it should not be, it is disgusting, it is upsetting, it is dangerous and so on. For GT, litter even threatens the community – as such, they do not attempt to engage with the wastes, items, and materials

beyond removing them, let alone rethink their relationship to them. The only type of project here that positively engages with waste is TRC, but even here the wastes are still functional, clean and whole. Compared to positive and productive types of initiatives, such as community food or community energy, waste becomes a challenging type of object, service, and sector to deal with. As the CWPs here suggest, it is possible to practice alternative ownership forms *around* waste and things, however rarely *on* the waste and things themselves.

6.5.3 Broadening alternative ownership

Paying attention to alternative ownership forms in practice, such as those that are practiced by the community waste projects in this research, gives rise to three ways that alternative ownership might be broadened in relation to waste and things.

Firstly, *access* over ownership emerges as an important alternative to private property. Access here signifies the possibility to use something while not owning it, including not being hindered by certain factors, such as exclusive memberships, expensive costs for accessing, or for example the need for having a credit card (cf. hire shops). Particularly SOT exemplifies how this can be organised: while SOT indeed owns the items, the software, the infrastructure, the brand, and even the idea, these are not viewed as more important than the access to things that SOT provides.

Second, *caring* for something that is shared can also be understood as a form of alternative ownership practice. The shared is often a space, and could for example be a street, a park, a beach, or a library. Whatever is cared for does not need to legally belong to a collective or a community, the space simply *becomes* commoned through the practice of joint caring. GT serves to exemplify this by caring for the one thing all Taifon inhabitants share, albeit passively: the physical spaces in their neighbourhoods. In so doing, these spaces come to be closer to being not only passively, but also actively, shared.

Third and last, something that all groups do is *view* objects and actions as belonging to themselves, their community, or a specific collective of people. *Practice* is in a sense abandoned here, and shared ownership *becomes* in the mind and through the perspectives of those who organise, take part in, or use an initiative. Even if legal ownership, as well as ownership in practice, is technically private, something being *viewed* as shared or belonging to a collective, could then be construed as alternative ownership. TRC is an example: the

collection of items and materials are technically intended for private property, but they, together with all of what TRC is, are *viewed* as belonging to the community.

Waste is, as such, possible to conceptualise through notions of alternative ownership – the definition of such ownership simply needs to be broadened to encompass and represent the myriad of relations that exist beyond the theoretical and historical constructs of commoning. These relations go beyond *legal*, and even beyond *practiced*, into *perceived*. Alternative ownership can furthermore be *structured* as well as *become* in different ways – the community waste projects here mainly highlight access over ownership and turning something passively shared into something actively shared through joint caring.

6.5.4 Alternative ownership – summary

This final section has examined how community waste projects exhibit and engage with the fifth commoning feature *alternative ownership*. To sum up:

- CWPs have different relations to different objects. The three cases engage with stuff, services, space and knowledge in a variety of ways so varied that it is difficult and even irrelevant to compare them. Together, they show that community waste projects can indeed be understood to practice alternative ownership forms.
- Waste is a private good. Most waste is the by-product of things that were private goods, and which were produced and sold to be private property. Waste is also often seen as a negative, something that lacks value. These two factors make waste challenging to conceptualise as something that can be alternatively owned as the above point summarises, however, waste (stuff) is not the only thing that is examined for ownership forms.
- New ownership practices for waste emerge. The analysis of what the CWPs under study here do, however, highlights that there are a myriad of ways that a project can practice alternative ownership, for example through access over ownership, by caring for a shared space, and simply through *viewing* something as belonging to a collective.
- CWPs can practice alternative ownership, if notion of ownership is expanded. Nonprivate forms of ownership is a key commoning feature, however one that is challenging to organise according to in dealing with wastes and private goods.

Applying commoning to waste highlights the need to expand notions of ownership – following Gibson-Graham et al. (2016), anything can be commoned. In relation to community waste action, access, care, and view appear as potential avenues for common-ing waste.

6.6 Reflecting on commoning

Community waste action has now been examined from the perspective of commoning: this has highlighted that commoning on waste is possible and often desirable, but also challenging. The aim of this analysis was not to test or further develop the approach to commoning adopted here, but to use commoning to draw out, make visible, and highlight radicality, alterity, and possibility within community waste projects, in order to identify possible strategies for more just and sustainable waste systems. Nevertheless, while commoning has been able to say something about the radicality, alterity, and possibility in the cases under study, the very same cases have also shown that there is scope to shift, soften, and develop the approach to commoning taken in this research. This section serves to reflect on commoning more generally, by summarising how the CWPs engage with radical and alternative organisational features, and by looking at the implications for how commoning may be viewed.

This chapter has shown that community groups can meet needs, including needs for services, social and community needs, and environmental needs. They sometimes do this better than state and market, because they are closer to local context. Beyond this, state and market have other goals, and community groups are freer to operate according to other logics, meaning that certain needs are easier to meet through community-based efforts. Community waste projects also originate amongst the grassroots, where the needs are most directly felt, and are often founded on, and operate through, cooperation. However, from the point of initiation, some groups choose to formalise, in order to increase their chance of success and to grow their ambitions. The process of formalisation (see Section 6.6.3) often crowds out and displaces those organisational aspects that are more radical, and that align more with commoning. The waste or items themselves can also pose challenges to organising according to alternative principles, and often lead groups to either mimicking capitalist operations or surrendering aspects of the waste handling to the state or market. Even so, applying commoning here highlights that avoiding the market and collective ownership are not the only ways in which initiatives can practice alternative forms of organising.

Some features of commoning were seemingly more attainable to the CWPs studied here than others. *Meeting needs* was the one feature where all groups appeared to succeed, although to varying extents. Bottom-up and cooperation were similar to each other in that they were heavily affected by the degree of formalisation that groups showed. This is likely to do with these features intersecting with governance and process, which can be viewed as the object of formalisation processes (in these processes, roles are defined, hierarchies are established, decision-making is closed off, working together happens more rarely, and so on). Outside the market and alternative forms of ownership, again, also appeared challenging for CWPs, and while the reasons for this were many (including the degree of formalisation), one reason in particular stood out: waste itself. As mentioned previously, waste is not usually a commons, nor the usual object of commoning (at least in a Western context). These two features, however, stand out as that which defines commoning more precisely, i.e. that which is special about commoning vis-àvis community organising more generally (see Chapter 3). It is in this nexus – two strongly defining commoning features and a complex, possibly destructive, capitalist material object – that it is possible to see the challenges that these groups face, the contradictions of mainstream waste management, as well as the possibilities for post-capitalist waste strategies that community action on waste can carry.

What emerges across the features is that community waste projects can, and do, practice commoning, but that that practice is almost always pragmatic, hybridised, and negotiated on the basis of too many challenges and difficulties arising when attempting to organise alternatively. In essence, this means that these groups are neither commons nor commoning initiatives. However, the aim of this research was not to determine whether or not they were, but rather to investigate *how* and *to what extent* groups practice commoning. Even so, if we *were* interested, the analysis here would indicate that the researched groups cannot be considered commoning initiatives. While this is likely to do with the capitalist context being challenging to exist within, there is *also* a case for introspection on what the groups have been measured against.

Turning to commoning itself, the assertion that commoning is difficult to practice could suggest that the *interpretation* of this form of organising may be the very reason that it appears so challenging, i.e. that the five features are too idealistic and theoretically pure. This suggestion, however, needs to be unpacked. Some of the five features may appear unattainable in a capitalist context, such as *outside the market* and *alternative ownership*, especially when having been applied to empirical cases, but the research aim, as well as the assumptions that this research rests on, must be recalled once again. The aim was to uncover if and how community action on

waste carries post-capitalist possibility, and one of the assumptions was that this possibility will only be found if sought through attention to radicality and alterity. As such, while the features of commoning may themselves appear utopian, their purpose was to highlight how the cases under study carry post-capitalist possibility, as well as when, and how, they do *not*. As the features emerged through a deep reading of a broad range of commoning literature, and as their purpose was to uncover radicality and alterity, they have done their job – they helped reveal that it is possible, but also extremely challenging, to organise (waste) alternatively under capitalism.

Beyond this, however, it is useful to acknowledge that the analysis in this research has accepted and shown that commoning *can* be pragmatised when applied, and that doing so can enrich our understanding of both community and alternative organising. The more radical and strongly defining commoning features *outside the market* and *alternative ownership* were both engaged with more pragmatically. The analysis of *outside the market*, for example, showed that the experience of non-capitalism was more important than the fact that both TRC and SOT expressed capitalist logics and utilised capitalist tools. Similarly, *alternative ownership* came to highlight that waste itself is actually rarely 'commoned', but that organisational aspects around waste can be approached outside of private ownership. The analysis of the features *bottom-up* and *cooperation* furthermore showed that while these are in danger of being excluded in the context of formalisation, an intentional effort can be made to reinstate spaces and moments for community. This attention to, and allowance for, pragmatism in the application of commoning highlights how community projects can, even in a capitalist context, organise alternatively, just not as perfectly radically as commoning might prescribe.

In essence, these reflections point to the value of both using purist organisational features as well as making space for pragmatism in the application of commoning as an analytical tool. The features themselves can reveal post-capitalist possibility, as well as the challenges that arise when attempting to organise alternatively. Simultaneously, a pragmatic approach can reveal present alterity and possibility, as well as be gentler towards, and more celebratory of, what community waste projects can achieve in their respective contexts and circumstances. Allowing for pragmatism alongside idealism, can thus highlight that seeds of commoning, as well as postcapitalist possibility, can presently be found in many places, as well as reveal the obstacles that stand in the way of nurturing and cultivating alternative forms of organising (around and against) waste.

6.7 Organisation, commoning and post-capitalism

Community waste action has now been examined from the point of view of commoning: this has highlighted that commoning on waste is possible and often desirable, but also challenging. The question remains, however, what applying a commoning lens to community action on waste can highlight for *post-capitalist* approaches to waste. This section will discuss the implications of this.

6.7.1 The continuation of a post-capitalist waste approach

Building on the emerging factors that were introduced at the end of Chapter 5, this section will add or develop an additional set of features that post-capitalist waste approaches and strategies need to pay attention to. These emerge through attention to commoning, but rather than being mainly inward-looking, i.e. pertaining to how an organisation is arranged internally, they are broader in scope. They are furthermore not contained to what we understand as community today – these principles could be applied in current non-community realms as well as in waste organisation of the future more generally. Stepping back to observe what emerges through attention to commoning and community waste action, six themes, and possible post-capitalist principles for waste organisation, can be highlighted.

Firstly, creating multiple benefits and positive outcomes that exceed the measurable has been identified as the hallmark of community initiatives across all chapters so far. Attention to commoning in this chapter specifically highlighted how community-based initiatives meet needs that are not only human, that they pay attention to context, and that they are synergistic. Especially the latter, in combination with the multiplicity of immeasurable outcomes from community action, appears as a possible key principle of post-capitalist waste approaches – where the aim is not only to manage wastes, but where there is also space for, and attention to, creating other positive outcomes. Examples here include personally meaningful employment, a sense of community, breaking social isolation, support for disadvantaged groups, and more. Moreover, Doran (2017) suggests that increased social richness could lead to decreased drive for material consumption. Decreased drive for material consumption would logically lead to decreased waste arisings, further strengthening the case

for how waste is handled through community, and how it could be handled in post-capitalist settings as well.

Second, commoning further highlights how waste organising needs to pay attention to fair governance. Specifically, this means that the parts of a process, an organisation, or its goods and service provision, that have an impact on e.g. locals, need to include spaces and moments for participation. Community waste projects seemingly do this through a variety of mechanisms, which range from occurring automatically due to the informality of an initiative, to being intentionally created by inviting locals to e.g. community consultations, volunteering, or board of trustees positions. This emerges as an important feature for post-capitalist waste strategies as well, both for fairness reasons as well as developing an understanding for context-specific needs and possibilities (as identified also in Chapter 5).

Third, challenging the status quo was also laid out as an important feature for commoning – while it is not *necessary* for practicing commoning, it is still identified by many commoners and commons thinkers as key, since injustices and unsustainabilities are rarely contained to one particular setting. They could either stem from further afield, have implications further afield, or also be present further afield. In this sense, the calls to action and for change that e.g. community waste projects put forth are indeed aligned with the attention to justice and sustainability in commoning, which is further desirable in the kind of post-capitalist waste strategies we might wish to see. In essence, a continued pursuit of more just and more sustainable ways of organising goods and service provision, as well as efforts to instigate change beyond one's locality, is what seemingly characterises community waste projects, and could further align with post-capitalist waste approaches as well.

The fourth point is that cooperation and collaboration remain core features of commoning, as well as post-capitalism. Whilst internal cooperation remains an important factor for (re)creating community in fair ways, and thus meeting social needs, an emphasis on external cooperation, rather than competition, emerges as a possible principle for post-capitalist ways of organising waste and waste prevention. Service provision that relies on collaboration amongst a variety of local and extra-local actors seemingly goes further in achieving multiple objectives. At the same time, removing competitive features from waste activities could serve to *de*capitalise waste, thus preventing e.g. waste exports or techno-fix discourses around how waste can be managed. Thus, nurturing collaborative relations,

245

making use of them when in need, as well as offering support when asked, emerges as a possible principle for post-capitalist waste strategies.

Fifth, as capitalism relies on a series of profit- and market-based mechanisms to organise itself, from which the unsustainabilities and injustices of national and global waste systems arise and are perpetuated, any post-capitalist approach must thus rely on *other* economic mechanisms and practices. Commoning applied to community waste projects highlights how this can (and cannot) be performed in the realm of waste and waste prevention – by being guided by other factors than profit and profitability, by (partially) offering or relying on free, donated, or volunteered value, by doing that which is not always profitable or by being willing to spend on that which matters (in this case sustainable and just waste practices). This further emerged as especially challenging to practice *under* capitalism, which will be given attention in Section 6.6.2 below.

Sixth and lastly, *sharing* appears as an important counterweight to capitalism within community, and here potentially post-capitalist, approaches to waste. Of note is that waste and the things that become waste are sometimes challenging to share – as such, it is other things that must be shared, for example process, service, space, and knowledge. Within broader post-capitalist waste strategies, especially the latter emerges as a key *shareable* in order to replicate and spread more sustainable and just waste practices.

Figure 6.3 summarises these six principles for organising waste under post-capitalism. As post-capitalism simultaneously describes non-capitalist practices, features and strategies in the present, while also referring to what organisation (of and for waste) might look like under conditions that can no longer be described as capitalist, these principles have to describe both what is possible as well as what is desirable. They have furthermore emanated from the community realm, by applying the more radical commoning lens, as community is the space where post-capitalist possibility can be found in the present. However, the principles are not contained to community, but could be applied elsewhere as well, both presently and in the future.



Figure 6.3. Emerging organisational principles for post-capitalist approaches to waste – discerned through attention to forms of organising in general, and commoning in particular.

Community waste projects practicing these principles (to varying extents) also has prefigurative significance (Yates, 2015; 2020). Prefiguration here comes through *performing* post-capitalist ways of organising of and for waste *into being* (Butler, 2010), i.e. creating a more desirable future in the present. CWPs (intentionally or unintentionally) practicing commoning and post-capitalist waste organisation also proves that it is indeed possible to organise differently, even under capitalist conditions.

While novel insights into possible and prefigurative post-capitalist waste management and prevention have been generated, this chapter has also shown the limits, constraints and challenges that face those who take action on waste outside of state and market. The next and final section will turn to the pressures, benefits and limits of formalisation, the process which many alternative projects end up going through.

6.7.2 Challenges and the response of formalisation

The challenges and constraints facing community waste projects are many – they are furthermore not new, as previous research have shown similar findings. These projects struggle with funding, volunteers, recognition, and many logistical issues that arise from these (e.g. unsuitable premises, health and safety, etc.). What waste projects also struggle with is the waste itself – too much of it (for example tons of books), too low quality (such as cheap clothing), and complex kinds (e.g. cigarette butts). Emerging in this chapter was that a common response to these challenges is seemingly to become increasingly formal. Three implications are discernible.

Firstly, formalisation appears as a key factor in determining if and how an initiative can engage with radical organisational features, such as those present in commoning. Formalisation, understood as the process of becoming constituted through a legal form, with employees with responsibilities, hierarchies, closed-off decision-making, and so on – recurs as *the* dividing point between the cases here. The more a project is formalised, the less space there is 'on the bottom', fewer moments of cooperation, and less activities and services performed outside the market – essentially, the more formality, the less is done in common. This follows from the direction of the process of formalisation – this process happens inevitably *from* a potentially more radical sphere, *to* the only formal sphere that exists, which is the capitalist system. While it is possible to inhabit a middle-ground, by for example being a charity like TRC, they still have to engage in capitalist practices in order to exist. Formalisation, as such, is seemingly a process that leads *away* from commoning and other alternative forms of organisation.

Second, this formalisation is seemingly preceded by a combination of pressures, ambitions, as well as the nature of the material that these initiatives target – capitalist waste. As has been argued previously, capitalist waste and products are highly complex and only entities with equal or similar levels of complexity can effectively manage that waste. As such, the projects with the highest ambitions to have the largest impacts thus attempt to build up an organisation that can deal with that complexity, i.e. be complex in itself. Doing so is challenging, perhaps impossible, in the informal realm, thus leading to pressures to become more formal. Once formalised, an organisation's ability to have larger impacts is increased, but its potential for practicing commoning is, again, decreased.

The third theme that emerges across the cases is that even if formalisation happens and commoning is not practiced or present, moments and spaces for community can be (re)created intentionally. SOT and TRC, being the two more formalised cases, serve to exemplify how spaces on the bottom and moments of cooperation are generated – for example through voting, consultations, volunteering, workshops, events, and socials. These emerge as especially important since they offer moments of *doing* or simply *being together*. Invoking Fournier's (2013) conceptualisation of commons organising – it is only through undertaking a joint action that the social can be reproduced. The social is fundamental in the commons and commoning – as such, by intentionally recreating such spaces and moments, the foundation for commoning can be laid again.

Fourth and lastly, while formalisation could prevent an organisation from engaging with radical commoning features, it is not automatically antithetical to *post-capitalist organisation of and for waste*. The reason for this is that capitalist wastes and products, which are in circulation today, are complex and challenging to deal with under informal conditions. The ambitions for these wastes and products might also align with post-capitalist values, but not be possible to reach without a certain level of formalisation. Formalising can thus be understood as a pragmatic step towards more fair and sustainable waste systems and practices, where post-capitalist principles, and certain commoning features, could still figure and guide operations.

6.8 Summary – commoning in Community Waste Project

This chapter has examined to how community waste projects, utilising the cases under study in this research, exhibit and engage with features of commoning, specifically addressing RQ3:

RQ3: How is commoning practiced in community waste projects, and what are the implications for post-capitalism?

This chapter has revealed that commoning in community waste projects is nuanced and complex – Table 6.6 overleaf summarises how the cases engage with each feature.

Feature	Glanhewch Taifon	The Reuse Collective	The Stuffotheque	Summary
Meeting needs (What are they and how are they met?)	Clean street + active community; met through joint litter-picking	Access to waste services + less waste squandered; met through community reuse centre	Access to things without need to own them + less consumption; met through item-lending library	Community action produces synergies; the environment is a valid need holder; complexity of waste cannot always be matched
Bottom-up (What remains on the bottom and what is advanced?)	Org. remains on the bottom; group challenges norms on waste, raises public and political awareness on litter	Org. semi-detached from the bottom; group challenges norms on thrift, educates the public on waste, models sust. waste management	Organisation mainly detached; org. challenges norms on ownership, models item- lending library	Proximity to context is a benefit of community action; 'bottom' can be intentionally (partially) created where lost; formalising can lead to larger impact, but detaching from local context
Cooperation (Is cooperation performed and how?)	Joint production of clean streets; cooperation forms the basis	Fragmented joint production of a service; cooperation is partially performed	Allocation of resources (organising <i>in common</i>); cooperation is partially performed	Only joint action can reproduce the social; formalising and structures remove cooperative moments; inclusivity in cooperation important; external collaboration is a key practice
Outside the market (Does the group organise outside the market?)	Almost entirely – only has a bank account	Partially – commodified, but non-profit, partially based on volunteering, provides a free service	No – money and sales involved in most aspects, for- profit/profit-with-a-purpose, provides some volunteering opportunities	Ambition to intervene in capitalist waste drives marketisation; high pressures from incumbent system solved through pragmatism; CWPs are still experienced as non-capitalist by users/members
Alternative ownership (Is alt. ownership forms practiced and how?)	AO practiced through caring for a shared space, and sharing knowledge freely	AO practiced through waste service being seen as belonging to everyone, knowledge is shared freely	AO practiced through access to things without having to own them, and through supporting a public space	Waste challenging to engage with through AO; ownership around waste – mainly focused on services, space, knowledge; new possible AO routes are viewing, access, and caring for something shared

Table 6.6. Summarising commoning features in each case.

The table on the previous page indicates that these groups practice commoning to very varying extents and in different ways – GT remains informal, yet has the potential to partially meet the needs for clean streets it set out to meet. It remains on the bottom, practices cooperation as joint production, is not marketised, and cares for a shared space. TRC organises itself as a charity and must thus observe regulations and laws – it can meet the waste needs it set out to meet, however only partially remains on the bottom, practices fragmented cooperation, is semi-marketised, but provides free services and know-how. SOT, lastly, partially meets the needs that exist for access to things, but does so while being more or less detached from the bottom, practices relatively little commons-based cooperation, is marketised, but creates opportunities to engage in non-ownership. To sum up, community waste projects can, and do, practice commoning in varying ways, which are determined by type of waste, context, and ambition in dealing with that waste. In essence, the analysis and discussion in this chapter have shown that practicing commoning on waste and under capitalism is challenging, to say the least, but possible if our understanding of commoning is slightly widened and space is made for a certain level of pragmatism in the face of a capitalist sector.

As community is the realm where post-capitalist possibility resides, applying the lens of commoning to community action waste could pull out a set of principles for post-capitalist organisation of and for waste. These focused on how strategies need to account for immeasurable and reinforcing activities and needs, such as those undertaken within community; how participation is key for justice and local grounding; that any post-capitalist strategy for waste must never accept the status quo as good enough and constantly seek to improve it; that particularly external collaboration is key in reaching objectives, especially ones that are contextually informed; that profit and cost must never take precedence over people and planet; and that sharing, while challenging for many wastes, is beneficial to more just and sustainable outcomes. These features take their place next to those identified in Chapter 5, thus forming a thorough set of principles for post-capitalist organisation of and for waste, which is informed by, and pays attention to, both the materiality of waste as well as alternative forms of organisation.

Applying a commoning lens to community waste action also highlights the complexity that CWPs must deal with, and that the response to this is often formalisation. Formalisation appears as hindering an initiative from engaging with commoning features – however,

251

intentional spaces, moments and strategies can be created and applied that reinsert these features, at least partially. What furthermore emerges from this is also that while commoning is indeed a form of post-capitalist organisation, the former is highly radical and idealistic, and the latter can be broader than this and contain space both for idealism *and* pragmatism, which stems from its definition as something that *can* happen today as well as accompany us into a future *after* capitalism. It is the attention to waste in this thesis that forces us to pragmatically expand our understanding of post-capitalist strategies, including commoning, as asserted above. In other words, practicing commoning on capitalist waste might prove challenging and insufficient – applying a commoning lens to community action, however, emphasises that it is indeed possible to inhabit a space of simultaneous idealism and pragmatism. In essence, post-capitalist waste strategies emerge not only as desirable, but also highly possible – not only in the future, but also in the present.

Chapter 7: Conclusion – post-capitalist organisation of and for waste

This final chapter will summarise what has been found and argued so far – it will also highlight the contributions of this research, the implications for practice and theory, as well as assert the creation of a new research agenda: post-capitalist waste studies.

This thesis started off with claiming that we do not engage enough in imagining alternatives to the unsustainabilities and injustices that define the modern world. Even when we *do* attempt to think beyond the bounds of this world, there is often a small voice that whispers "but that won't work". Indeed, one of capitalism's powers is to make itself and its parts seem irreplaceable, and that *there is no alternative*. Where it concerns waste, this voice is also accompanied by an unwillingness to face the decay that we leave behind. The aim of this thesis was thus to prove that not only is it possible to organise waste in alternative (and post-capitalist) ways – it is actually already happening. In order to prove this, I set out to answer three research questions:

RQ1: What are the characteristics and possibilities of the UK Community Waste Movement?

RQ2: What is the role of, and perspectives on, waste in Community Waste Projects, and what are the implications for post-capitalism?

RQ3: How is commoning practiced in Community Waste Projects, and what are the implications for post-capitalism?

The starting point for this exploration was threefold: (1) this thesis is based on the assumption that it is in the community realm that post-capitalist possibility and potential strategies can be found, as this is the 'free-est' of capitalist influence; (2) it further assumes that any attempt to formulate any kind of suggestion for post-capitalist waste strategies must pay attention to

both materiality as well as organisation; and (3) it is only by applying more radical lenses on community action that such alterity and possibility can be identified.

The following section will summarise each chapter, followed by concise answers to each of the questions on the previous page. Theoretical and empirical contributions will further be highlighted. The chapter then turns to discussing the implications of this research – for practice (community waste projects and Local Authorities). This conclusion, and thus thesis, is ended by drawing up a new research agenda for post-capitalist waste studies.

7.1 Thesis summary

7.1.1 Chapter by chapter

Chapter 1 laid out the need for a path to imagining post-capitalist ways of organising waste. Starting from the assertion that capitalist waste management strategies are insufficient for ever being able to organise waste in acceptably sustainable and fair ways, the introduction to this thesis proposed that we seek possibility in the realm that is the most untouched by capitalism – community. It went on to identify several gaps and unexplored territories in the literatures of post-capitalist organisation and critical waste studies, including the disconnect between these two bodies of scholarship.

Chapter 2 introduced a comprehensive literature review and the theoretical underpinnings of this research. Detailing the characteristics of capitalist waste management, followed by alternative conceptualisations of waste, it then went on to introduce postcapitalist organisation. Specifically community, community-based waste approaches, grassroots innovation, diverse economies, and commoning were given attention. The latter was drawn together from a deep reading of commoning literature and restructured to form a more holistic, intentional, and systematic approach for critically studying commoning, thus addressing the lack of such an approach, as identified in Chapter 1. This chapter also introduced a framework for how to engage with both materiality and commoning.

Chapter 3 followed with an in-depth description of the methodological approaches and methods chosen to undertake this project. It started off with situating this research within the school of critical theory, to emphasise the importance of research in normalising *more* just and sustainable ways of doing and organising. It then detailed the research process from identifying the field of study to undertaking the mapping survey to choosing cases.

Methods and analysis were comprehensively dealt with, before ending with attention to ethical considerations.

The first of the results chapters – Chapter 4 – explored the Community Waste Movement. Its empirical basis was the results from the survey, and with this, it detailed and mapped this movement in the UK. Initiatives, groups, organisations, and projects in this movement were identified as diverse, yet similar in many ways. The findings identify this movement as populated by a plethora of groups targeting a range of wastes: litter in urban and natural areas; metal scrap; reusable items and clothing; repairable electronics; and shareable things, toys, and tools. The groups are furthermore characterised as non-profit or community-based, both formal (e.g. charity) and informal (e.g. non-constituted). They struggle with similar issues, such as funding, reliability of volunteers, and commercial pressures. These challenges seemingly relate to being community-based in a system that favours profit and formality. A majority of survey respondents reported that they were achieving their aims, which centred on e.g. reducing waste to landfill, increasing awareness around waste, creating opportunities for the community, and more. CWPs were furthermore identified as having multiple and varied outcomes beyond their official or initial aims, many of which centred on social or 'soft' aspects, such as community-building, breaking isolation, supporting vulnerable people, providing meaningful volunteer and employment opportunities, and so on. A waste hierarchy for community action was introduced, which indicated that CWPs mainly work with prevention, reduction, as well as keeping materials out of landfills, industrial disassembling facilities, and natural areas. As these projects thus both move waste up the (standard) waste hierarchy as well as create a variety of socially meaningful outcomes, they were identified as performing vital services to society. Furthermore, through providing facilities or opportunities to engage with solutions for global problems locally, initiatives in this movement were also recognised as containing and performing possibility for a more sustainable and just waste system.

Chapter 5 provided further depth to the mapping of the Community Waste Movement by presenting three cases of community action on waste – these were the litter-picking group Glanhewch Taifon, the community reuse hub The Reuse Collective, and the item-lending library The Stuffotheque. These groups were shown to engage with a multitude of wastes and materials and to provide socially meaningful outcomes above and beyond their official aims, thus echoing the findings from Chapter 4. The cases were then questioned for the different

roles that waste plays in their efforts, and what the implications of this might be for postcapitalist waste strategies. Examining the materiality of waste and the implications for community waste action revealed that (1) the dominant perspectives on waste identified in Chapter 2 – waste as *resource* and *hazard* – are also present in the community realm, but lead to different outcomes; (2) attention to context is a crucial component for understanding how and why communities take action on waste in the ways they do; (3) emotion plays an important role in community; and (4) waste is understood as negative, but leads to positive actions. As the aim of this thesis is to uncover post-capitalist possibilities for waste, and doing so by searching for it in the community realm, this chapter ended with suggesting six initial principles for post-capitalist waste approaches, which emerged from the aforementioned insights. As such, these are practiced by community waste projects presently, but could also inform future waste strategies. The six principles were centred on:

- 1. Having other motivations than profit or statutory responsibilities.
- 2. Developing strategies that are informed by context.
- 3. The understanding that waste connects across sectors, as well as upstream and downstream.
- 4. That emotion should be allowed in instigating or guiding waste action, as this can serve to detechnicalise standard waste management.
- 5. That waste needs to be understood as simultaneously negative (as it has environmental and social justice impacts) and positive (as it provides reasons for action).
- 6. How post-capitalist waste strategies need to be able to account for *current* capitalist waste, as well as engage and create more sustainable and just waste practices for the future.

These principles all emerged from attention to materiality, which is reflected in what they prescribe: the waste, what it does, and how it can be viewed, are in focus, *not* how to organise *around* it. Additionally, this chapter was the first to properly show that there are limits to what can be achieved in community action on waste.

The final result chapter – Chapter 6 – applied a commoning lens to the cases under study. The examination here highlighted how community waste projects can synergistically

meet multiple needs, specifically needs that are unmet through state and market-based systems. The environment also emerged as a valid need-holder. CWPs were further identified as both remaining on and detaching from the bottom, while also advancing objectives around e.g. instigating change. Community-based waste projects also examples of how waste services and activities can be organised through cooperation rather than competition, and how doing in common can (re)create the social and community. Within the features bottomup and cooperation it was identified that formalisation leads to less space for participation on the bottom and fewer moments for cooperation – however, these can be intentionally, yet partially, recreated. CWPs can also be organised to varying extents outside or on the market, through operating informally, being non-profit, and promoting or providing free or low-cost practices and activities. Lastly, initiatives like these can promote, facilitate, or engage with alternative ownership forms and practices, such as caring for shared spaces, sharing knowledge freely or by promoting e.g. borrowing instead of private property. However, whilst showing that CWPs can and do exhibit commoning features, this chapter also highlighted that alternative forms of organising are challenging and that certain aspects of commoning, e.g. its emphasis on non-marketised relations and activities, are difficult to put into practice. This chapter then moved on to adding an additional six principles for post-capitalist waste approaches, which emerged from studying how community waste projects organise, specifically in relation to commoning, presently. As for the principles from Chapter 5, these can also serve to inform future waste strategies. The six principles were:

- Allowing for strategies which emphasise synergistic and immeasurable activities and outcomes.
- 2. Space should be made for local participation and decision-making.
- Never accepting the status quo as sustainable or just enough, and always calling and searching for better ways of doing things.
- 4. Support and collaboration are sought externally, and given and practiced when requested.
- 5. Profit, cost, and other capitalist logics are not guiding operations, and that people and planet are prioritised.
- 6. Sharing is practiced where possible, especially around knowledge and how-to.

These principles are, again, based on organisation, i.e. they pertain to how an entity organises *around* the goods or service provision in question. The material sphere of *what* is organised is less important (as this was dealt with in Chapter 5). This chapter ended by recognising, again, that organising alternatively is challenging under capitalism, and that many CWPs respond to such challenges by formalising. Formalisation has consequences for how *commons-y* an initiative is and can be, but is not always antithetical to post-capitalist organisation. This stems from the recognition that post-capitalism is broader than commoning, that current capitalist wastes still need handling, and that this handling could still be informed by post-capitalist principles.

7.2.2 Answering research questions

While the previous section summarised the chapters, which addressed the research questions, these questions have yet to be succinctly *answered*. This section puts forth these answers.

RQ1: What are the characteristics and possibilities of the UK Community Waste Movement?

This movement is characterised by community groups that target a variety of wastes through a range of actions, activities, and forms of organisation, from informal litter-picking groups to furniture reuse charities to item-lending libraries. They attempt to minimise waste to landfill, incineration and export, as well as create social value. This movement struggles with funding, volunteers, recognition, and commercial pressures, while still having impacts on waste tonnage and other immeasurable benefits, such as creating community and supporting the disadvantaged. As such, they perform vital, and often under-recognised, services to society, while also creating small versions of a more just and sustainable waste future.

RQ2: What is the role of, and perspectives on, waste in Community Waste Projects, and what are the implications for post-capitalism?

In Community Waste Projects, waste is often understood as a hazard and a threat, and other times as a resource, which both echo capitalist waste perspectives. However, in the context of community, these perspectives seemingly do not lead to capitalist waste management, even if the waste is complex and created under capitalist conditions. This is explained by waste invoking sometimes powerful emotions, which, in a community context, instigate positive and empowering action on waste. This emphasises that post-capitalist waste approaches also need to be driven by non-capitalist motivations, take context into consideration, account for waste's connections up- and downstream, allow emotions, understand that waste can both be negative and positive, and lastly create solutions that can at once deal with capitalist waste in the present and prefigure more sustainable and just practices for the future.

RQ3: How is commoning practiced in Community Waste Projects, and what are the implications for post-capitalism?

Community Waste Projects can, and do, practice commoning in different ways and to varying extents – the more informal an initiative is, the easier and more likely it is to organise according to commons principles. However, in the face of a system that favours profit and the formal, and in dealing with complex, capitalist wastes, CWPs are sometimes forced to practice less radical forms of organisation in order to survive. Based on this, I assert that our understanding of commoning itself needs to expand and loosen, in order to account for the complexity of modern wastes, which otherwise will inevitably lead to the need for waste management of equal complexity. Emerging from how community initiatives organise around waste in the present, post-capitalist waste approaches could, and should, focus on meeting multiple needs simultaneously, create space for participation, ensure that sustainability and justice are strived for, rely on both internal and external collaboration, prioritise people and planet over profit and cost, and emphasise sharing where possible. CWPs organising according to these principles prefigure a more sustainable and just waste future.

This thesis has, as such, reached its aim of uncovering if and how waste can be organised under post-capitalism. By paying attention to materiality and organisation, and by looking at how waste is acted on and organised in the community realm – the field with the least capitalist influence – this thesis has shown that not only is it desirable to organise differently around waste, and not only is it possible. Such organisation is also practiced right now – the principles that can be gleaned from current community waste action can also inspire how post-capitalist waste approaches might, and should, be organised. In essence, these emphasise people and planet, attention to context, an ability to create numerous benefits that go beyond waste tonnage, and never accepting that how waste is organised currently is sustainable and just enough.

7.2.3 Contributions

The final section in this summary pertains to the contributions of this research. These centre on two strands: empirical and theoretical. These are each detailed below.

7.2.3.1 Empirical contributions

The empirical contributions of this thesis were two - focused on the Community Waste Movement as well as individual Community Waste Projects. The first empirical contribution concerns the CWM and the projects and initiatives contained therein – this research has mapped and updated previous research in this field. The last comprehensive mapping was undertaken nearly 20 years ago (Luckin & Sharp, 2003), with additional works undertaken on specific types of CWPs (Robbins & Rowe, 2002; Alexander & Smaje, 2008; Dururu et al., 2015; Curran & Williams, 2010; Spitzer, 2004; Williams et al., 2012; Slater et al., 2010). Non-UKbased research on community-based waste action has also been performed, notably in Ireland (Davies 2007; 2008), Sweden (Zapata Campos & Zapata, 2017), India (Colon & Fawcett, 2006), Brazil (King & Gutberlet, 2013), and the Global South more generally (Wilson, Velis & Cheeseman, 2006). This thesis updates previous research on UK community waste action, and makes a significant contribution to how such action might be understood and conceptualised beyond national boundaries as well. More specifically, a comprehensive picture is drawn in Chapter 4, detailing what kind of groups exist, what they do and aim for, what their contributions are, what they struggle with, as well as how we might come to view them as containing more possibility than what is evident on the surface. As outlined at the end of Chapter 4, studying community waste action in 2021 calls for broadening what is included in this field. Mainly recycling and reuse were previously the main activities - these are now accompanied by litter-picking and item-lending libraries. As such, not only has this thesis updated an out-of-date research field – it has also charted its expansion.

The second empirical contribution is that of a deepened understanding of how community waste projects function, how they do and do not practice radical forms of organisation such as commoning, and how they might prefigure post-capitalist waste strategies in reality and on the ground. Previous case research on CWPs is either out of date (e.g. Sharp & Luckin, 2006; Robbins & Rowe, 2002), focuses on public perceptions of reuse in different locales, i.e. not focused on CWPs themselves (e.g. Dururu et al., 2015), or is concerned with very specific types of organisation, such as furniture reuse projects (e.g. Curran & Williams, 2010). Chapters 5 and 6 in this thesis added depth and richness to our understanding of CWPs, which inhabit different levels in the waste hierarchy, different types of urban/rural locations, and all target different kinds of waste and things. From this deepdive, I have shown that context emerges as both a key factor in determining and shaping action, as well as a central benefit of community waste action; that emotion drives action on waste in the community realm; that the waste might be seen as the enemy, yet is that which rallies a community together; that formalising might become a tool in dealing with capitalist wastes; that community waste action delivers many immeasurable benefits, and so on. What these chapters have furthermore advanced and added to our knowledge of this movement is a recognition and understanding of how present community waste projects can, and do, practice alternative forms of waste organising - these are alternative to mainstream capitalist waste strategies, both in terms of how waste is viewed and acted upon, as well as the arrangements around the waste themselves. These forms are seemingly more sustainable and just, with benefits such as moving waste up the waste hierarchy and putting people and planet above profit, to name a few. Such modes of organising are arguably more desirable to the point that they could offer an insight into how we might organise waste non- and postcapitalist, now and in the future.

7.2.3.2 Conceptual contributions

The theoretical contributions of this research are four, and mainly focus on commoning. The first theoretical contribution was the commoning framework outlined in Chapter 2, which followed from the identified lack of a structured approach to critical commons studies. Ostrom (1990) created eight design principles for Common Pool Resources, which are much too instrumental, narrow, and unable to capture the political nature of commons organising. Since then, important work has been undertaken into commons and commoning organising

(De Angelis, 2017; Bollier & Helfrich, 2012; Bollier, 2014), but this has rarely attempted to be systematic, like Ostrom's (1990) design principles, beyond definitions such as resource + community + rules = commoning (Bollier, 2014). At the start of my research, I thus experienced a need for, and a lack of, a structured commoning framework, which I set out to create. It should be noted that this was not advanced in a results chapter, and neither was it an entirely new creation. Rather, it was the result of a deep reading of much commoning literature, and a response to the lack of a coherent, holistic, and structured framework for approaching real-world examples of non-state and non-market action and initiatives. In its purest form, this framework is also relatively idealistic – this stemmed from an initial recognition on my part that many conversations around commoning (research-based, e.g. Bollier & Helfrich (2012), but also of informal origin, e.g. chats, blogs, and conference talks) apply the words *commoning* and *commons* very liberally, to the point that these words start to carry less meaning and weight. While the actual application of this framework will be detailed next, I should mention that my hope with formulating a relatively idealistic and systematic approach to studying commoning is that it will be applicable to a broad range of community projects in order to highlight and uncover present alterity to capitalism and prefigurative potential for post-capitalist systems and practices.

The second contribution was produced through the application of commoning in general, and this framework in particular, to waste. As mentioned, commoning has rarely been applied to waste before (see previous section – works include e.g. Lane (2011) and Gidwani (2013)), which meant that this research would bring novel insights from such a combination. However, this also posed a challenge for this research – from early on, I was aware of the potential disconnects and mismatch between a positively oriented form of organisation, such as commoning, and a potentially destructive material, such as waste. Even so, this fuelled my efforts of testing the commoning framework I had compiled, and the idea of commoning in general. As has been demonstrated in this thesis, it is indeed possible to organise action and service provision around waste according to commoning principles. However, the analysis in this thesis highlighted the need for a certain allowance for pragmatism in conjunction with waste – so whilst I had devised an idealistic commoning framework, this proved challenging to adhere to when the material one deals with is highly capitalist and complex in nature. Waste – what it symbolises (e.g. failure, negative value), what it is connected to (consumption, consumerism, environmental problems), and how it is

interlinked with capitalism – has arguably not been the usual target for commoning, neither in practice nor in theory. By viewing community action on waste through a commoning lens, what emerged in Chapter 6 was that commoning is sometimes unequipped in dealing with something as complex as waste. The previous chapter showed, for example, that the environment emerges as a valid need-holder side by side with humans, that notions of ownership need to be nuanced, and that we perhaps even need to accept that without matching complexity (which cannot be done without certain levels of formalisation), commoning on waste will never be a match for capitalist waste management. These insights are new, both for commoning as well as community action on waste.

The third conceptual contribution of this thesis is the approach to generating insights for post-capitalist waste strategies through simultaneous attention to materiality and organisation. The need for adopting this dual approach arose from the recognition that capitalist waste management is not only a question of organisation, but also of how waste is viewed and understood, with waste embodying especially interesting forms of sociomateriality, sociospatiality, body materiality and so on (Hawkins, 2006; Douglas, 1966; Moore, 2012). To my knowledge, such a dual interrogation of organisation and materiality of waste has not been done before. What this thesis has shown, however, is that this combination is highly rewarding and fruitful – as stated, the different insights generated in Chapters 5 and 6 differ from each other, i.e. the principles identified in Chapter 5 would not have emerged from sole attention to organisation, and vice versa. To reiterate, the differences between these two sets of principles emerge both from what the principles arose from (i.e. materiality or organisation) as well as what they prescribe. For example, Chapter 5 recognised that community action on waste is complex in that the waste is viewed as a negative, yet the action it gives rise to is positive. As such, the suggested principle for postcapitalist waste strategies is to attempt to not view waste as wholly unproblematic (i.e. cast it as purely a resource), or wholly as a disgusting threat that needs ridding (as it actually provides opportunities for community cohesion). Here, it is the attention to the materiality of waste that gives rise to a principle that emphasises waste's physical, social, spatial, and emotive attributes. On the other hand, Chapter 6 asserted for example that external collaboration was an important feature - one which arose through the attention to commoning. The significance of collaboration emerges not because of how waste acts on communities, but because an alternative mode of organising could serve to highlight the

benefits of how community waste projects *arrange* and *organise* their work. The third contribution of this thesis is thus the creation of an analytical approach to generating insights into post-capitalist possibility for specific systems and practices, such as waste.

The final conceptual contribution is the principles for these post-capitalist waste strategies themselves, as well as the approach to post-capitalism that they symbolise. The principles have already been introduced in this chapter, and will receive further attention in the next section, but deserve a few words on what they contribute to the literature on postcapitalism. As noted in Chapter 2, I position myself and this research neither entirely in the traditional Marxist camp of anti-capitalism and immanent critique (Stahl, 2013; Schmid, 2019), nor entirely in the post-Marxist realm of economic difference, as purported by Gibson-Graham (1996; 2006). Post-capitalism is here understood as a present and future state of systems and practices that can no longer be understood as capitalist – i.e. the historical and current material structures and legacies of capitalism are not ignored, but neither do they form a totalising account of impossibility and hopelessness for the future. While being informed by the above, and conceived of in the vein of possibility and hope, the implications for post-capitalism that I have presented in this thesis depart from the aforementioned meta level, and neither do they neatly fit in either camp of non-capitalist understandings (Schmid, 2019). The principles suggested in this thesis are relatively practical, and furthermore inhabit a space between pragmatism and idealism. They assert that a different approach to postcapitalism is possible – one which rests on the acknowledgment of contemporary struggles in the face of capitalism, yet which upholds a beacon of hope and possibility; one which fixes current organisational and material modes as a possible starting point for post-capitalist imaginary and action; one which emphasises the possibility of bringing such current forms of organising into a future after capitalism; and lastly, one which practically prescribes, instead of theoretically discusses, ways of organising and relating (to waste) that are possible to align with today.

7.2 Implications for practice

In Chapters 1-3, I claimed that this research is not only informed by a wish to create academically relevant knowledge. I also want the insights and knowledge generated here to be useful for those who practice and take action, so that this research can have an impact on

the waste systems I set out to critique. Before outlining what the implications for practice are, a few general points on how the findings, arguments, and discussions here might be approached are in order.

7.2.1 General points for all waste practitioners

The first point on the agenda is of course to summarise the principles for post-capitalist approaches to waste, which were presented separately in Chapters 5 and 6. Figure 7.1 on the previous page fuses the two original figures and creates a colourful illustration of what dually informed waste strategies might pay attention to. These 12 principles were generated from paying attention to what community waste projects already do, how they organise, how they view waste, and what emerges as alternative to standard waste management strategies. As is evident, these principles are not contained to the community realm, but can also inform what LAs do, and some could, to a certain extent, inform for-profit, profit-with-a-purpose, and non-profit market-based actors too.

MOTIVATION

Motivated by other (or additional) factors than profit or statutory responsibilities.

ALLOWING EMOTION

Waste causes emotion which can instigate and inform action. Emotion can serve to detechnicalise techno-fix WM.

SYNERGISTIC AND SOFT STRATEGIES

Space and attention to synergistic and immeasurable activities and outcomes.

COLLABORATIVE ECOLOGIES

Relying on internal and external collaboration; seeking support externally when needed.

CONTEXTUALISED STRATEGIES

No one-size-fits-all, since waste and context will determine what is needed.

DUALITY OF WASTE

Waste needs to be viewed as both negative and positive, since it has env. impacts, but can create moments of action.

SPACE FOR PARTICIPATION

Those affected are included in decisionmaking and consultations.

NON-PROFIT PRACTICES

Profit and other capitalist motives and logics do not guide operations; people and planet are prioritised over cost.

BROADER STRATEGIES

Waste is complex and connects across sectors, material flows and spatialities.

PRAGMATIC IDEALISM

Strategies need to account for current capitalist wastes, while also engaging in more just and sustainable waste practices.

STRIVING FOR FAIRNESS AND SUSTAINABILITY

Never accepting that the status quo is good enough; always calling to action.

SHARING THE SHAREABLE

Emphasising sharing, joint and public ownership; alternative forms of access, where possible; and sharing knowledge.

Figure 7.1. 12 principles for post-capitalist approaches to waste. Discerned through attention to materiality and organisation.

The second point to highlight is on the term *post-capitalism*. In this thesis, postcapitalism is used as a simultaneous divider between how standard waste management is organised – which is inevitably created and informed by capitalist logics – and other forms of managing and approaching waste; and as a descriptor of more just and sustainable waste approaches. At once, it invokes these *other* forms in the present, while also highlighting that these are desirable in a future, where society is organised in a way that can no longer be described as capitalist. The point here is that while post-capitalism might bear a political connotation, it only does so insofar as capitalism can never be just or sustainable enough. Surely, what is desirable is thus non-capitalism, here hopefully termed post-capitalism. The strategies on the previous page, however, need not be labelled post-capitalist, if one is uncomfortable with such a strong term – they could simply be called *sustainable* or *fair*. The end-goal is the same: if these strategies are implemented where waste is handled or prevented, more sustainable and fair waste systems and practices will be created.

The third and final point relates to the principle *Pragmatic idealism*, as this carries significant weight in organising waste in the present and the future. As has been asserted throughout this thesis, modern day wastes are complex, i.e. they are made up of a multitude of materials, which have been mined, felled, extracted, produced, engineered, shipped, and assembled, only to be used in a different part of the world, where few of these materials can be disassembled, fully recycled, or safely contained. Most of these materials and products have come about through capitalist production - it should then be logical that in a postcapitalist society, we will not have such complex wastes anymore. While it can be debated whether or not such a society will come to pass (it is outside the scope of this research), what is clear is that we will likely have to deal with capitalist wastes for the foreseeable future. Whilst this might feel like a race against time, with mountains of rubbish ever-growing, the reality is that this is what we, as those concerned with waste, need to deal with. So while a post-capitalist society might not generate capitalist wastes, the path there needs to be a pragmatic patchwork of strategies informed by principles, such as those on the previous page, targeting capitalist wastes and simultaneously prefiguring post-capitalist waste systems and practices.

7.2.2 Implications for community action on waste

The realm in focus for this thesis is community. I argued in Chapters 1-3 that this is where the most post-capitalist possibility to be found – while I retain this standpoint, I do want to, briefly and temporarily, distance myself from the instrumentality of it. Community does not only inspire us for how we might organise systems of provision and social relations differently – this realm is doing incredibly important things in the present, all the while facing an unforgiving environment. This section offers some points, conclusions, and observations that might be useful and relevant to projects and groups in this realm, beyond the principles in Figure 7.1.

Firstly, the critical examination of community action in this thesis should not be viewed as *critique* of what individual initiatives, or yet individuals within initiatives, do or do not do. The point of adopting a critical approach is not to shine a light on how e.g. GT does not do enough to combat littering, but instead to show that what surrounds them – the local, national, and global context – is the limiting factor, and that choices following these contexts and limits are understandable. What I mean to say with this is that I would like community projects to see me as a critical friend – not of their actions, but of the context they find themselves in, so that they might be better equipped at navigating this unforgiving environment. However, I would also like to point out here that I do not claim to know best – what this research has shown is that proximity to local context is a crucial strength of community action. My contribution to community action on waste is thus to point to why initiatives might struggle and suggest a pathway around it.

Second, while I would like to offer the prediction that community action on waste will soon not be needed anymore, this would not reflect the (near) future of waste. Capitalist wastes and insufficient strategies for dealing with it will likely remain over the foreseeable future – as such, community will continue playing a crucial role in handling especially the reusable, repairable and preventable, as well as rogue materials. Echoing some of the stories I was told in my case studies – where initiatives get comments like "you shouldn't be doing that" – there is of course a case for that community should not be dumped with responsibility for vital, societal services. However, referring back to the principle *Pragmatic idealism*, the fact remains that there is a gap between the amounts of waste that continue to arise and the strategies dealing with this waste. This is the space where community can come in and pick up that which is forgotten or left behind – without such action, the world would be far worse

off. I would here also like to invoke the principle *Synergistic and soft strategies* from above, whereby community action has multiple benefits that go far beyond waste tonnage. Focusing on these benefits might strengthen the motivation, resolve, and case for continued community action.

Third, and highly related to the point above, is an observation on how community action on waste could shift or grow in response to the continued onslaught of capitalist wastes. The commoning feature *bottom-up* highlighted that advancing certain objectives upwards is a crucial effort when working for sustainability and justice – and indeed, Chapter 4 showed that groups in the CWM already do this. I would like to make the point here, however, that perhaps *more* of this is needed. If things do not change upstream, i.e. before something becomes waste or is even produced, they will likely not change downstream, and what has also been shown throughout this thesis is that community organising can only do so much with complex wastes. An increased focus on waste prevention, waste minimisation or whatever is needed for a particular type of initiative⁵, coupled with calls for action, might thus be a useful shift, or area to expand into, for community waste initiatives. However, this campaigning and calling for action should not be interpreted as a sole focus on individuals, but could, and should, involve change work on multiple levels, including Local Authorities, businesses, and government.

Lastly, I would like to suggest a list of points to heed or things to do, which have emerged throughout this thesis. These are akin to policy recommendations, but are for community practitioners, not policy-makers. They appear in addition to the principles outlined in Figure 7.1, and focus more specifically and immediately on community initiatives:

• Make use of your contextualised position. Community initiatives have a unique proximity to locality. Use this to understand what is needed, what is possible, and what is desirable within your given context. Make sure that local residents, LAs and funders know about this unique and crucial position.

⁵ I would like to point out here that certain projects can only exist because of waste, such as charity shops or furniture aid initiatives – these would of course like to see a continued stream of reusable things, but something which has been reported here is the increasingly low quality of items. As such, these projects might not campaign for *less* waste, but for *a different type* of waste.

- Focus on collaboration. A theme that emerges across some initiatives is that mutual support and collaboration are key in succeeding look for support amongst local politicians, local businesses, other community groups, and on social media. Collaborating with e.g. Local Authorities further emerges as especially important when the wastes that are dealt with are complex teaming up with a more formal and institutional actors means that the values that guide community action will be represented in more spaces.
- Emphasise the multiple benefits. Community projects provide multiple benefits not all of them are immediately visible and few are measurable. Ensure that these are captured in other ways (stories, testimonies, interviews, photos, film) and share these far and wide – including Local Authorities and funders. The community waste realm is relatively hidden and working away on the side lines, all the while providing vital services to society – these need to be showcased to the world.
- Be part of the Community Waste Movement. View your action as a stand against unjust and unsustainable waste and production systems – link up with others to politicise your action and spread the message. This can be done on a local scale, but also translocal, e.g. by linking up on social media.
- Continue service provision. Finally, if you do not want to politicise your actions or engage in change work, you do not have to. This research also shows that community initiatives provide many vital services, something which should be celebrated in itself. Be proud of what you do.

7.2.3 Implications for state action on waste

While being on the receiving end for a lot of the critique put forth in this thesis, I contend, counter to what many commons thinkers might argue, that the state has a vital role to play in the ushering in of sustainable waste systems and practices. This section details conclusions and observations that I hope are useful to those working in regional waste management, again, beyond the principles in Figure 7.1.

Firstly, this research has hopefully shone a light on what community initiatives for waste do, i.e. the many activities, services, and societal as well as environmental benefits they provide and create. What has also emerged is that is within the community realm that we

might find inspiration for how more just and sustainable waste systems and practices could be designed and organised. However, echoing Davies (2007, p. 69) again – community and the local scale are often viewed as "a site of policy implementation, rather than innovation". On the contrary, the groups studied in Chapters 4-6 prove that they are *not* a site of policy implementation, but rather a space where services are provided, benefits are created, innovations are thought of and tested, contextualised knowledge is generated, and calls for more sustainable and just waste systems and practices are made. If Local Authorities are committed to instigating change towards such systems and practices, they would do well in looking to what non-state, non-market actors already do, as well as inviting these to conversations and decisions about such changes, and supporting them in as many ways as possible.

Second, while capitalist wastes require disassembling and containing that matches their complexity, there is not one single form for this complexity. The principles for post-capitalist (or sustainable) waste approaches outlined in Figure 7.1 could well be implemented in Local Authorities' waste management and prevention strategies, i.e. they are not contained to radical community initiatives. While the current onslaught of waste of course needs the be managed right here, right now, there is more to be done beyond this – a further focus on prevention; infusing waste work with contextual knowledge, gleaned from e.g. community initiatives; prioritising environmental and social benefits over financial costs; inviting communities and individuals into discussions and decisions; adding immeasurable outcomes to goals and objectives; sharing knowledge and making use of shared knowledge on the sustainable organisation of waste services, and so on. So whilst for example incineration plants cannot be repurposed tomorrow, other strategies can be implemented to slowly decrease the need for them.

As for community, what follows is a brief list of what regional waste teams can do, beyond the post-capitalist waste strategy principles. These could be relevant for policymakers, but are mainly targeted at those who deal with waste every day:

• **Be open.** Specifically, be open to that there are other ways of organising waste and waste services, and these might be found in places such as community. As this research has shown, there are already groups, projects, organisations and initiatives

out there that work with waste in innovative or alternative ways. Be open to that these actions might, if nothing else, be complimentary to standard waste management.

- Do not rely on community. Communities are increasingly performing important services to society, including waste minimisation, and while this is commendable, some services are too important to be left to the informal realm and put on the shoulders of those who care, for no compensation. Community should thus not be viewed as a convenient way of saving money on service provision.
- Give support. While this is not a new call to action for LAs or policy-makers, it remains important. The support given does not need to be financial: it can be to provide equipment, storage, venues, transportation, legal advice, financial advice, organisational advice, and so on. It can also be to employ a community convenor that can create and support a network of community waste managers. An important side note to this is also that it is important to communicate that support is not given as a cheap way out of otherwise costly service provision, but rather in a bid to recast the local scale as grounds for innovation and experimentation, and for adding multiple benefits to the effects on waste tonnage that CWPs might have.
- Invite community and third sector. As has been iterated time and time again in this thesis – community groups have a unique position in their proximity to context. Inviting community groups can thus serve the dual purpose of gaining a better understanding of the local scale and context, as well as make waste management more inclusive, contextually sensitive, and democratic. This can be done in a number of ways, e.g. by holding open citizens' assemblies, by having more frequent consultations, or by having quarterly or bi-annual meetings with CWP representatives.
- Communicate about waste management. Waste is an ignored materiality the effects of waste, waste arisings, what happens in waste disassembling plants, as well as the many benefits that *council* action on waste has, need to be communicated to the public. This should not be done in an attempt to shame or nudge individuals to change their behaviour, but rather in an effort to initiate wider conversations about waste. This can be achieved in different ways, for example through digital and printed reports and booklets, sharing on social media, and collaborating more with schools as well as local CWPs. This could also have different foci, e.g. what it looks like inside a

Mixed Recycling Facility, the experiences of a waste collection officer, how and why LAs support community initiatives, what happens to furniture that is brought to a recycling facility, and so on.

Use the current climate to your advantage. Lastly, climate change, The Attenborough Effect (McCarthy & Sánchez, 2019), The Greta Thunberg Effect (Sabherwal & van der Linden, 2021) are all creating a climate where change appears more acceptable – use this opportunity to implement more radical or comprehensive strategies, for example inspired by the principles in Figure 7.1.

7.3 A frame and agenda for future post-capitalist waste research

In Chapter 1, I claimed that there was a gap between post-capitalist studies, waste studies, commoning, and community waste research. None of these have, to date, been thoroughly combined – I have shown, however, in this thesis, that combining them provides novel and original insights into how we might conceptualise post-capitalist organisation of and for waste. As this is the first piece of research combining these fields of study, it cannot claim to be exhaustive. The following section sets out 1) a frame for what needs to be heeded when studying post-capitalist waste organisation, as well as 2) next steps for future research.

7.3.1 Framing post-capitalist waste studies

To build a frame for post-capitalist waste studies, I argue that there are four key issues the need to be observed. Firstly, the basis of post-capitalist waste studies ideally needs to be the combination of organisation (i.e. how systems of provision and social relations are arranged) and materiality (i.e. how waste is viewed by, acted on by, and acts on humans and human society). Capitalist waste management is the result of both the materiality of waste (its complexity, its ability to invoke emotions, its physical connections to justice and sustainability, and so on) and how it is organised (e.g. who does what how?). As such, post-capitalist waste strategies also need to attend to both the material and the organisational side of waste. Previous research has generated important insights about non-capitalist forms of organisation (e.g. Fournier, 2013), as well as how waste is intertwined with capitalism (e.g. Moore et al., 2018), but as I have shown in this thesis, continuing to combine these has the potential to develop a more thorough understanding of post-capitalist waste approaches.

Second, *community* does not need to be the sole focus of such studies. I have argued here that it is within community that most post-capitalist possibility can be found. While I stand for this, this is not to say that such possibility cannot also be found elsewhere. Schmid and Smith (2020), for example, argue that social practices – e.g. sharing, making, repairing, and so on – is a particular field in which post-capitalism could usefully be developed. Furthermore, when community *is* the subject of study, it needs to be approached critically (Aiken et al., 2017), yet not so critically that we become blind to the many small and immediate benefits that community action has. In this thesis, I set out to follow a critical community approach, and while I did, I also made sure to celebrate community where it was due – as such, I suggest that future post-capitalist waste studies, when focusing on community, combine criticality with celebration.

Third, the *waste* in post-capitalist waste studies should not be viewed as confined to the types of waste under study in this thesis. The choice to exclude e.g. food waste was made to delineate the scope of this research – however, post-capitalist approaches to food waste are also in need of research. Other wastes, which were excluded here, but which need attention, are for example packaging, non-recyclables, garden waste, hazardous waste, commercial waste, industrial waste, and more. As I have shown in this thesis, however, waste is arguably still seen as an environmental threat, even when it is not physically there (like for The Stuffotheque), making the case for a continued emphasis on waste prevention. This could go beyond item-lending libraries, and include for instance package-free and low-waste shops, bulk-buying groups, practices such as minimalism or voluntary simplicity, or paradigms such as dematerialisation or simplification. Related to waste prevention through e.g. simplification is the suggestion that increased social richness leads to less of a need for material consumption (Doran, 2017), a proposition which is well aligned with post-capitalist approaches to waste. In other words, different kinds of waste as well as waste prevention need further attention in post-capitalist waste studies.

Fourth and lastly, commoning (De Angelis, 2017; Fournier, 2013) was utilised in this research as a lens through which alterity to capitalism could be uncovered, i.e. a radically different form of organisation was applied to community action in order to tease out what is not capitalist and what could be part of a non-capitalist system. While post-capitalism can surely be imagined using a range of theories, lenses, and starting points, emphasising present alterity remains an important move in post-capitalist studies, since this allows us not only to

dream, but also asserts the possibility of a different organisational system (following notions of prefiguration (Yates, 2015; 2020)). So, while commoning was used here, there are a range of other forms of organisation or lenses through which to study such organisation, that are similarly radical, e.g. diverse and community economies (Gibson-Graham et al., 2020), real utopias (Olin Wright, 2010), socialist or cooperative forms of organising (Safri, 2020), and the social and solidarity economy (Miller, 2010). These could, like commoning, offer the prefigurative insights that are crucial to the kind of present and future forms of postcapitalism that are intended here.

As the frames for post-capitalist waste studies have now been put together – a simultaneous attention to organisation and materiality, a suggested focus on community or practice, a broad understanding of waste, and utilising radical notions to tease out present alterity – what remains is an outline for which steps are needed next, in order to advance the research agenda for post-capitalist waste studies.

7.3.2 Next steps for post-capitalist waste research

To meaningfully tackle the mounting waste crisis, there is a pressing need for further research on post-capitalist approaches to waste. Below, I set out what I see as the necessary next steps in this agenda.

First, there is a need to test the 12 principles I have developed for post-capitalist waste management. These need to be tested more widely in community settings, but also within more formal waste strategies to highlight the potential distance between their radicality and what is deemed feasible to implement in the present mainstream. To do this, I would call for close work alongside community waste initiatives and Local Authorities to codesign interventions that test and evaluate some or all of the principles. For example, the principle *contextualised strategies* could be tested through piloting community consultation on local waste management practices, followed by an implementation of suggestions that arise from this consultation. Similarly *synergistic and soft strategies* could be tested by codesigning non-quantitative evaluation measures with Local Authorities and community waste initiatives, which focus on the many immeasurable and further-reaching impacts that community waste action, and thus potential post-capitalist waste approaches, has. Second, and related to the step above, is a need for further research on the differences between intentional and unintentional prefiguration of post-capitalist organisation. As noted, not all community initiatives are intentionally radical or intentionally non-capitalist, which could have implications for what kind post-capitalist features or principles emerge. To approach this, I would invite case study research that focuses on differently radical waste projects, amongst them especially ones that frame their action as anti-, non-, or postcapitalist. Such research would ideally be organised as participatory action research to codesign the study with community waste practitioners. A collaborative approach should further be taken to create radical – and less radical – strategies for post-capitalist waste management. This could be performed as workshops, focus groups, or even as community assemblies.

Third, while I focused on wastes that individuals come into contact with in this thesis (i.e. household waste, DIY waste, various rogue materials, etc.), there is a need to continue with as well as expand the types of waste studied. Especially food waste, but also construction waste, e-waste, and commercial waste, emerge as important types of rubbish that needs further research. From the survey performed in this thesis, we know that e.g. wood recycling projects and repair initiatives are abundant in the UK; from previous research, it is also clear that various food sharing projects exist (e.g. Davies & Evans, 2019). For further research on how action on such wastes can prefigure post-capitalist strategies, I would call for similar lines of inquiry to this project, i.e. mapping for breadth, and case studies for depth, of community projects that deal with these other forms of waste. I contend that materiality will continue to remain a crucial lens through which to engage with post-capitalist strategies, but research on other wastes will also tie in with other, exciting dimensions of materiality, e.g. around nature (wood), electricity and energy (e-waste), and food and eating.

Fourth, while I have focused on present, real-world examples that can prefigure a post-capitalist future in this thesis, there is much important work to be done to develop clear scenarios and pathways to post-capitalist waste futures. Indeed, this would continue to build the case that post-capitalism is possible, thus contributing to overcoming the belief that no other system than capitalism could exist. I propose that such work adopts a multi-stakeholder, co-creation approach that draws together various perspectives and views, e.g. from Local Authorities, community waste practitioners, larger community waste networks, and so on. I would call for this research to utilise visioning approaches, such as backcasting,

that focus on a desirable waste future as a starting point. Granted that in any kind of work on scenarios, pathways, and visions, *desirable* needs to be defined. While this research agenda specifically calls for post-capitalist approaches to waste, *desirable* arguably needs to be opened up to a multitude of perspectives, to truly prefigure a more just waste future, and to represent the emancipatory values that guide post-capitalist waste studies.

Fifth, and lastly, the framework of combined attention to materiality and organisation that I propose in this thesis is a novel approach to studying post-capitalist possibility, but waste is not the only materiality, sector, system and practice that is intertwined with capitalism, and organised unsustainably and justly. The framework created in this thesis (i.e. attention to materiality and organisation) thus needs to be tested on other sectors of society, e.g. water, energy, food, technology, care, and so on. While this emerges as a step beyond post-capitalist *waste* studies, I argue that this is ultimately an initial, yet crucial, step towards post-capitalist *sustainability* studies. For example, while e.g. community food initiatives have been studied before, they have not been researched for both materiality and organisation. As such, I would call for co-designed research projects, where, initially, community food projects (or any other sector, e.g. energy) are the only ones in focus, much like in this thesis. This should be structured so as to co-create principles for, scenarios of, or pathways to postcapitalist food futures. At that point, I would see an invitation for further research extending beyond community and into e.g. policy and NGOs.

The identified steps are intended to be initial stepping-stones for further developing the research agenda for post-capitalist waste studies. Beyond these emerges a plethora of possible to directions, specifically as a result of the seriousness and urgency of the environmental and social impacts of capitalist wastes. Additional to *management* and *strategies* are calls for fundamentally reimagining forms of life and society that are more sustainable and just, including co-created ideas of what is sustainable and just. Following waste's ability to escape, vex, and simultaneously pose seemingly insurmountable challenges to the future of Earth, more truly radical interventions and experiments in different temporal and spatial points in the lives of things and waste are needed.

7.4 A final word

Like the Queen of Hearts in *Alice in Through the Looking-Glass* points out, there is much value in engaging in imagination. While the Queen is not a person we should take all that much advice from, she was right in claiming that we should devote time every day to imagine that which might seem impossible – at a certain point, it might shift from impossible to *possible*. Similarly, Hamlet, in the second epigraph to this thesis, suggests that we should be open to the possibility that there might be more to the world than what we already know. The openness intended here is not standard scientific curiosity, but rather a questioning of the core of modern life, and an openness to the idea that fundamentally and radically different ways of structuring society and sociality are possible. This thesis has bridges the imagined impossibility of societal change through an openness to the possibility that desirable forms of organising are not mere phantoms of the future, but rather very real entities in the present.

The title of this thesis asks if community or waste is 'the gateway to all good things' – the answer to this must be nuanced. I do still contend that it is in the realm of community action that we presently find post-capitalist possibility, even if this space is threatened by co-optation, instrumentalisation, and is sometimes used a responsibility dump by a neoliberal state. At the very least, the forms of organisation, and what is preferred, allowed, and practiced in this realm, could all serve to prove that what we are imagining – sustainable and just ways of organising (for and against) waste – is actually not that impossible after all. Likewise, while mountains of rubbish continue to grow around the world, waste itself can emerge as a gateway to action, which brings with it numerous benefits, such as community cohesion, and local empowerment. Furthermore, waste emerges as a symbol for intangible and invisible issues, such as climate change and non-rubbish pollution, and as something that is relatively easy to take action on and against. As such, community and waste are both gateways to – perhaps not *all good*, but certainly – *better* things.

I set out in this thesis to uncover if and how community action on waste carries postcapitalist possibility. In conclusion, I have identified that community action on waste does indeed carry post-capitalist possibility, and have further shown that it does so by organising around waste according to radically different principles compared to contemporary mainstream waste management. The narrative that I have developed in this thesis is that the biggest threat facing humanity is perhaps not global ecological disaster, but rather an inability and unwillingness to imagine that *there are alternatives* to what we take for granted and

believe to be natural. In this thesis, I have contributed proof that not only is it fruitful to engage in imagining the impossible, but that it also reveals that what might seem impossible at first glance, is actually not only possible – it is already being practiced. Truly, the only thing that is certain in an uncertain world is that if we do not believe that these alternatives *are* possible, and pay attention to how they are already being put into practice, then they will forever remain on the rubbish heap of discarded, impossible ideas.

Bibliography

- Acksel, B., Euler, J., Gauditz, L., Helfrich, S., Kratzwald, B., Meretz, S., Stein, F., Tuschen, S., (2016). Commoning – perspectives on conviviality. *Retrieved on 2017-11-03 from https://www.opendemocracy.net/britta-acksel-johannes-euler-leslie-gauditz-silkehelfrich-birgitte-kratzwald-stefan-meretz-flavio-s*
- Aiken, G. T., Middlemiss, L., Sallu, S., Hauxwell-Baldwin, R. (2017). Researching climate change and community in neoliberal contexts: an emerging critical approach. *WIREs Clim Change*, 8(463). doi: 10.1002/wcc.463
- Alexander, C., Smaje, C. (2008). Evaluating third sector reuse organisations in the UK: Casestudies and analysis of furniture reuse schemes. *Resources, Conservation and Recycling*, 52(5), 719–730. https://doi.org/10.1016/j.resconrec.2007.09.005
- Alvesson, M., Sköldberg, K. (2000). *Reflexive Methodology: New Vistas for Qualitative Research*. Sage.
- Archer, M. (1998). Realism in the social sciences. In Archer, M., Bhaskar, R., Collier, A., Lawson, T., Norrie, A. (Eds.). *Critical realism: Basic Readings.* Routledge.
- Baden, D., Peattie, K., Oke, A. (2020). Access over ownership: Case studies of libraries of things. *Sustainability (Switzerland)*, *12*(17), 1–18. https://doi.org/10.3390/su12177180
- BAN. (2018). Holes in the Circular Economy. WEEE Leakage from Europe. A report of the e-Trash Transparency Project. Basel Action Network.
- Bartl, A. (2014). Ways and entanglements of the waste hierarchy. *Waste Management*, 34(1), 1–2. https://doi.org/10.1016/j.wasman.2013.10.016
- Bennholdt-Thomsen, V. (2012). Subsistence: Perspective for a Society Based on Commons. In D. Bollier, S. Helfrich. (Eds.) *The Wealth of the Commons. A World Beyond Market & State.* Levellers Press.
- Bergmann, M., Mützel, S., Primpke, S., Tekman, M. B., Trachsel, J., Gerdts, G. (2019). White and wonderful? Microplastics prevail in snow from Alps to the Arctic. *Science Advances* 5(8).
- Boda, C. S. (2018). Community as a key word: A heuristic for action-oriented sustainability research. *Sustainability (Switzerland)*, *10*(8), 1–19. https://doi.org/10.3390/su10082775
- Bollier, D. (2012). Global Enclosures in the Service of the Empire. In D. Bollier, S. Helfrich. (Eds.) *The Wealth of the Commons. A World Beyond Market & State.* Levellers Press.
- Bollier, D. (2014). *Think Like a Commoner. A Short Introduction to the Life of the Commons.* New Society Publishers.

- Bollier, D., Helfrich, S. (2015). Introduction. In D. Bollier, S. Helfrich. (Eds.) *Patterns of Commoning. A World Beyond Market & State.* Levellers Press.
- Bradley, K., Pargman, D. (2017). The sharing economy as the commons of the 21st century. *Cambridge Journal of Regions, Economy and Society, 10*(2), 231–247. https://doi.org/10.1093/cjres/rsx001
- Brand, U., Wissen, M. (2021). *The Imperial Mode of Living: Everyday Life and the Ecological Crisis of Capitalism.* Verso.
- Bryman, A. (2008). Social research methods. 3rd Edition. Oxford University Press.
- Bulkeley, H., Askins, K. (2009). Waste interfaces: Biodegradable waste, municipal policy and everyday practice. *Geographical Journal*, *175*(4), 251–260. https://doi.org/10.1111/j.1475-4959.2008.00310.x
- Bulkeley, H., Watson, M., Hudson, R. (2007). Modes of governing municipal waste. *Environment and Planning A*, *39*(11), 2733–2753. https://doi.org/10.1068/a38269
- Butler, J. (2010). Performative agency. *Journal of Cultural Economy*, *3*(2), 147–161. https://doi.org/10.1080/17530350.2010.494117
- Caffentzis, G. (2004). A Tale of Two Conferences: the Crisis of Neoliberalism and Question of the Commons by George Caffentzis. *Alter Globalization Conference, August 9, 2004,* 1–34.
- Caffentzis, G., Federici, S. (2014). Commons against and beyond capitalism. *Community Development Journal*, 49(S), 92–105. https://doi.org/10.1093/cdj/bsu006
- Cambridge dictionary. (n.d.). *Cooperate.* Accessed 2021-01-27 at https://dictionary.cambridge.org/dictionary/english/cooperate?q=Cooperation
- Carroll, L. (1871). Through the Looking-Glass and What Alice Found There.
- Castree, N. (1999). Envisioning capitalism: Geography and the renewal of Marxian political economy. *Transactions of the Institute of British Geographers*, *24*(2), 137–158. https://doi.org/10.1111/j.0020-2754.1999.00137.x
- Charity Retail Association. (2021). Key Statistics. *Charity Retail Association*. Accessed 2021-05-05 at https://www.charityretail.org.uk/key-statistics/
- Chatterton, P. (2016). Building transitions to post-capitalist urban commons. *Transactions of the Institute of British Geographers*, *41*(4), 403–415. https://doi.org/10.1111/tran.12139
- Chatterton, P., Featherstone, D., Routledge, P. (2012). Articulating Climate Justice in Copenhagen: Antagonism, the Commons, and Solidarity. *Antipode*, *45*(3), 602–620. https://doi.org/10.1111/j.1467-8330.2012.01025.x

- Chatterton, P., & Pusey, A. (2020). Beyond capitalist enclosure, commodification and alienation: Postcapitalist praxis as commons, social production and useful doing. *Progress in Human Geography*, 44(1), 27–48. https://doi.org/10.1177/0309132518821173
- CIWM. (2016). *Reuse in the UK and Ireland a 'State of the Nations' report for the Chartered Institution of Wastes Management*. Chartered Institution for Wastes Management.
- Clapp, Jennifer. 2002. "The Distancing of Waste: Overconsumption in a Global Economy". In Princen, T., Maniates, M., Conca., K. (Eds.) *Confronting Consumption*. MIT Press.
- Coffrey, A. (2018). Doing Ethnography. Sage.
- Cohen, A., Court, D. (2003). Ethnography and case study: A comparative analysis. *Academic Exchange Quarterly*, *7*(*3*), 283-287.
- Collard, R. C., Dempsey, J. (2017). Capitalist Natures in Five Orientations. *Capitalism, Nature, Socialism, 28*(1), 78–97. https://doi.org/10.1080/10455752.2016.1202294
- Collins, R. (2020). Youth cultures of everyday waste (avoidance). *cultural geographies, 27*(2), 293-305. https://doi.org/10.1177/1474474019871637
- Colon, M., Fawcett, B. (2006). Community-based household waste management: lessons learnt from EXNORA's 'zero waste management' scheme in two South Indian cities. *Habitat International* 30: 916–931.
- Community Economies Collective. (n.d.). *Diverse Economies Iceberg*. Accessed 2021-05-21 at https://www.communityeconomies.org/resources/diverse-economies-iceberg
- Cooke, B., Landau-ward, A., Rickards, L., Cooke, B. (2019). Urban greening, property and more-than-human commoning. *Australian Geographer*, 1–20. https://doi.org/10.1080/00049182.2019.1655828
- Corry, O. (2010). Defining and Theorising the Third Sector. In Taylor, R. (Eds). *Third Sector Research*. Springer.
- CPRE. (2020). Litter Law: England and Wales. CPRE, The Countryside Charity.
- Curran, A., Williams, I. D. (2010). The role of furniture and appliance re-use organisations in England and Wales. *Resources, Conservation and Recycling*, *54*(10), 692–703. https://doi.org/10.1016/j.resconrec.2009.11.010
- CWR. (n.d.). *Our story*. Accessed 2021-07-21 at https://communitywoodrecycling.org.uk/our-story/
- Davies, A. R. (2006). Environmental justice as subtext or omission: Examining discourses of anti-incineration campaigning in Ireland. *Geoforum, 37*, 708–724. https://doi.org/10.1016/j.geoforum.2005.06.005

- Davies, A. R. (2007). A wasted opportunity? Civil society and waste management in Ireland. *Environmental Politics*, *16*(1), 52–72. https://doi.org/10.1080/09644010601073564
- Davies, A. R. (2008*a*). Civil society activism and waste management in Ireland: The Carranstown anti-incineration campaign. *Land Use Policy*, *25*(2), 161–172. https://doi.org/10.1016/j.landusepol.2007.04.002
- Davies, A. R. (2008b). The Geographies of Garbage Governance: Interventions, Interactions and Outcomes. Ashgate.
- Davies, A. R. (2012). Geography and the matter of waste mobilities. *Transactions, 37,* 191–197.
- Davies, A., & Evans, D. (2019). Urban food sharing: Emerging geographies of production, consumption and exchange. *Geoforum*, 99, 154–159. https://doi.org/10.1016/j.geoforum.2018.11.015
- Davies, A. R., Mullin, S. (2012). Waste and Community enterprises in Ireland: co-operation, collaboration and the formation of the community resource network. In Davies, A. R. (Eds.). *Enterprising Communities.* Emerald.
- De Angelis, M. (2003). Reflections on alternatives, commons and communities. *The Commoner, Winter 2003,* 1–14.
- De Angelis, M. (2007). *The Beginning of History: Value Struggles and Global Capital.* Pluto Press.
- De Angelis, M. (2014). Social revolution and the commons. *South Atlantic Quarterly*, *113*(2), 299–311. https://doi.org/10.1215/00382876-2643630
- De Angelis, M. (2017). *Omnia Sunt Communia: Principles for the Transition to Postcapitalism.* Zed Books.
- De Angelis, M., Harvie, D. (2014). The Commons. In Parker, M., Cheney, G., Fournier, V., Land, C. (Eds). *The Routledge Companion to Alternative Organisation*. Routledge.
- De Wolff, K. (2017). Plastic Naturecultures: Multispecies Ethnography and the Dangers of Separating Living from Nonliving Bodies. *Body and Society*, *23*(3), 23–47. https://doi.org/10.1177/1357034X17715074
- Defra. (2018). *Our waste, our resources: a strategy for England.* Department for Environment, Food & Rural Affairs. Available at: https://www.gov.uk/government/publications/resources-and-waste-strategy-forengland
- Defra. (2020). *UK Statistics on Waste.* Department for Environment, Food & Rural Affairs. Available at: https://www.gov.uk/government/statistics/uk-waste-data

Defra. (2021). Waste Management Plan for England. Department for Environment, Food & Rural Affairs. Available at: https://www.gov.uk/government/publications/waste-management-plan-for-england-2021

Della Porta, D., Diani, M. (2006). Social movements – an introduction. Blackwell Publishing.

- Dijkgraaf, E., Vollebergh, H. R. J. (2004). Burn or bury? A social cost comparison of final waste disposal methods. *Ecological Economics*, *50*(3–4), 233–247. https://doi.org/10.1016/j.ecolecon.2004.03.029
- Doran, P. (2017). A Political Economy of Attention, Mindfulness and Consumerism: Reclaiming the Mindful Commons. Routledge.
- Douglas, M. (1966). *Purity and Danger: An analysis of the concepts of pollution and taboo.* Routledge.
- Dururu, J., Anderson, C., Bates, M., Montasser, W., Tudor, T. (2015). Enhancing engagement with community sector organisations working in sustainable waste management: A case study. *Waste Management and Research*, *33*(3), 284–290. https://doi.org/10.1177/0734242X14567504
- EC. (1999). *Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste.* European Commission.
- EC. (2008). Directive 2008/98/EC of the European Parliament and of the council of 19 November 2008 on waste and repealing Directives. European Commission.
- EC. (2019). Report from the Commission the to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Implementation of the Circular Economy Action Plan. European Commission.
- Ellen Macarthur Foundation. (2012). *Towards the Circular Economy.* Available: http:// www.ellenmacarthurfoundation.org/business/reports
- Ellen MacArthur Foundation. (2016). *The New Plastics Economy: Rethinking the Future of Plastics*. Ellen MacArthur Foundation, World Economic Forum and McKinsey & Company.
- Esteva, G. (2014). Commoning in the new society. *Community Development Journal, 49*(S), 144–159. https://doi.org/10.1093/cdj/bsu016
- Etzioni, A. (1973). The third sector and domestic missions. Public Administration Review, 33(4), 314–323.
- Euler, J. (2018). Conceptualizing the Commons: Moving Beyond the Goods-based Definition by Introducing the Social Practices of Commoning as Vital Determinant. *Ecological Economics*, 143, 10–16. https://doi.org/10.1016/j.ecolecon.2017.06.020

- Evans, D. (2012). Beyond the Throwaway Society: Ordinary Domestic Practice and a Sociological Approach to Household Food Waste. *Sociology, 46*(1), 41-56.
- Feola, G. (2019). Capitalism in sustainability transitions research: Time for a critical turn? Environmental Innovation and Societal Transitions, 35(July 2018), 241–250. https://doi.org/10.1016/j.eist.2019.02.005
- Feola, G., Nunes, R. (2014). Success and failure of grassroots innovations for addressing climate change: The case of the Transition Movement. *Global Environmental Change*, 24, 232–250. https://doi.org/10.1016/j.gloenvcha.2013.11.011
- Fletcher, R., Dressler, W., Büscher, B. (2015). Naturetm Inc.: Nature as neoliberal capitalist imaginary. *The International Handbook of Political Ecology*, 359–372. https://doi.org/10.4337/9780857936172.00035
- Flyvbjerg B (2006) Five mis-understandings about case study research. *Qualitative Inquiry* 12(2): 219–245.
- Fournier, V. (2013). Commoning: on the social organisation of the commons. *M@n@gement*, *16*(4), 433–453.
- Frazer, B. (1999). Common Recollections: Resisting Enclosure "by Agreement" in Seventeenth-Century England. *International Journal of Historical Archaeology*, 3(2), 75– 99.

Freecycle. (n.d.). Find a Town. Accessed 2021-03-05 at https://www.freecycle.org/browse/

Freegle. (n.d.) About Us. Accessed 2021-07-21 at https://www.ilovefreegle.org/about

- Geels, F.W., 2004. From sectoral systems of innovation to socio-technical systems: insights about dynamics and change from sociology and institutional theory. *Research Policy* 33, 897–920.
- Geyer, R., Jambeck, J. R., Law, K. L. (2017). Production, use, and fate of all plastics ever made. *Science Advances*, *3*(7), 25–29. https://doi.org/10.1126/sciadv.1700782
- Ghisellini, P., Cialani, C., Ulgiati, S. (2016). A review on circular economy: The expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner Production*, *114*, 11–32. https://doi.org/10.1016/j.jclepro.2015.09.007
- Gibson-Graham, J. K. (1996). *The End of Capitalism (as we knew it): A Feminist Critique of Political Economy.* University of Minnesota Press.

Gibson-Graham, J. K. (2006). A Postcapitalist Politics. University of Minnesota Press.

Gibson-Graham, J. K. (2010). *Post-development Possibilities for Local Regional Development*. In Pike, A., Rodriguez-Pose, A., Tormaney, J. (Eds.). *Handbook for Local and Regional Development*. Routledge.

- Gibson-Graham, J. K., Cameron, J, Healy, S. (2013). *Take Back the Economy: An Ethical Guide for Transforming Our Communities.* University of Minnesota Press.
- Gibson-Graham, J. K., Cameron, J., Healy, S. (2018). Commoning as a postcapitalist politics. In Amin, A., Howell, P. (Eds.) *Releasing the Commons*. Routledge.
- Gibson-Graham, J. K., Dombroski, K. (2020). Introduction to *The Handbook of Diverse Economies:* inventory as ethical intervention. In Gibson-Graham J. K., Dombroski, K. (Eds.). *The Handbook for Diverse Economies.* Edward Elgar Publishing.
- Gidwani, V. (2013). Six theses on waste, value, and commons. *Social & Cultural Geography*, 14(7), 773–783. https://doi.org/10.1080/14649365.2013.800222
- Gille, Z. (2010). Actor networks, modes of production, and waste regimes: Reassembling the macro-social. *Environment and Planning A*, *42*(5), 1049–1064. https://doi.org/10.1068/a42122
- Ginn, F., Ascensão, E. (2018). Autonomy, Erasure, and Persistence in the Urban Gardening Commons. *Antipode*, *50*(4), 929–952. https://doi.org/10.1111/anti.12398
- Gregson, N., Crang, M. (2010). Materiality and waste: Inorganic vitality in a networked world. *Environment and Planning A*, *42*(5), 1026–1032. https://doi.org/10.1068/a43176
- Gregson, N., Crang, M., Fuller, S., Holmes, H. (2015). Interrogating the circular economy: the moral economy of resource recovery in the EU. *Economy and Society*, *44*(2), 218–243. https://doi.org/10.1080/03085147.2015.1013353
- Gregson, N., Watkins, H., Calestani, M. (2013). Political markets: recycling, economization and marketization. *Economy and Society*, *42*(1), 1–25. https://doi.org/10.1080/03085147.2012.661625
- Gritzas, G., Kavoulakos, K. I. (2016). Diverse economies and alternative spaces: An overview of approaches and practices. *European Urban and Regional Studies*, *23*(4), 917–934. https://doi.org/10.1177/0969776415573778
- Gutberlet, J. (2008). *Recovering Resources Recycling Citizenship: Urban Poverty Reduction in Latin America.* Ashgate.
- Gutberlet, J., Kain, J. H., Nyakinya, B., Ochieng, D. H., Odhiambo, N., Oloko, M., Omolo, J., Omondi, E., Otieno, S., Zapata P., Zapata Campos, M. J. (2016). Socio-environmental entrepreneurship and the provision of critical services in informal settlements. *Environment and Urbanization*, 28(1), 205–222. https://doi.org/10.1177/0956247815623772
- Habermann, F. (2012). We Are Not Born as Egoists. In D. Bollier, S. Helfrich. (Eds.) *The Wealth of the Commons. A World Beyond Market & State.* Levellers Press.

Habermas, J. (1981). New Social Movements. Telos. Vol 1981.49, 33-37.

Hacking, N., Flynn, A. (2018). Protesting against neoliberal and illiberal governmentalities: A comparative analysis of waste governance in the UK and China. *Political Geography*, *63*, 31–42. https://doi.org/10.1016/j.polgeo.2017.12.004

Hardt, M., Negri, A. (2009). Commonwealth. Harvard University Press.

- Hardin, G. (1968). The Tragedy of the Commons. *Science*, *162*, 1243–1248. https://doi.org/10.1126/science.162.3859.1243
- Harding, S. G. (2004). Introduction: Standpoint Theory as a Site of Political, Philosophical, and Scientific Debate. In Harding, S. (Eds.). *The Feminist Standpoint Theory Reader: Intellectual and Political Controversies.* Routledge.
- Hargreaves, T., Hielscher, S., Seyfang, G., Smith, A. (2013). Grassroots innovations in community energy: The role of intermediaries in niche development. *Global Environmental Change*, 23(5), 868–880. https://doi.org/10.1016/j.gloenvcha.2013.02.008
- Hargreaves, T., Haxeltine, A., Longhurst, N., Seyfang, G. (2011). Sustainability transitions from the bottom-up: civil society, the multi-level perspective and practice theory. *CSERGE Working Paper No. 2011-1.*

Harvey, D. (2001). *Globalization and the "Spatial Fix"*. Geographische Revue 2: 23–30.

Harvey, D. (2005). A Brief History of Neoliberalism. Oxford University Press.

- Hawkins, G. (2006). *The Ethics of Waste: How We Relate to Rubbish.* Rowman & Littlefield Publishers.
- Healy, S., Borowiak, C., Pavlovskaya, M., Safri, M. (2018). Commoning and the politics of solidarity: Transformational responses to poverty. *Geoforum*. https://doi.org/10.1016/j.geoforum.2018.03.015
- Helfrich, S. (2012). The Logic of the Commons and the Market: A Shorthand Comparison of Their Core Beliefs. In D. Bollier, S. Helfrich. (Eds.) *The Wealth of the Commons. A World Beyond Market & State.* Levellers Press.
- Helfrich, S., Bollier, D. (2014). *Commons*. In G. D'Alisa, F. Demaria, G. Kallis. (Eds). *Degrowth: A Vocabulary for a New Era*. Routledge.
- Hetherington, K. (2004). Secondhandedness: Consumption, disposal, and absent presence. Environment and Planning D: Society and Space, 22(1), 157–173. https://doi.org/10.1068/d315t
- Hillery, G.A. Jr. 1955. Definitions of community: Areas of agreement. *Rural Sociology* 20: 111-123.

- Hird, M. J. (2012). Knowing Waste: Towards an Inhuman Epistemology. *Social Epistemology*, 26(3–4), 453–469. https://doi.org/10.1080/02691728.2012.727195
- Holmes, H. (2018). New spaces, ordinary practices: Circulating and sharing within diverse economies of provisioning. *Geoforum*, *88*(2018), 138–147. https://doi.org/10.1016/j.geoforum.2017.11.022
- Hoogma, R., Kemp, R., Schot, J. & Truffer, B. (2002) *Experimenting for Sustainable Transport: The Approach of Strategic Niche Management*. Spon Press.
- Hultman, J., Corvellec, H. (2012). The European waste hierarchy: From the sociomateriality of waste to a politics of consumption. *Environment and Planning A*, 44, 2413–2427. https://doi.org/10.1068/a44668
- Interpol. (2020). Strategic Analysis Report. Emerging criminal trends in the global plastic waste market since January 2018. Available at: https://www.interpol.int/News-and-Events/News/2020/INTERPOL-report-alerts-to-sharp-rise-in-plastic-waste-crime
- Jameson, F. (2003). Future City. New Left Review, 21: 65-57.
- Jeffrey, A., Mcfarlane, C. Vasudevan, A. (2012). Rethinking Enclosure: Space, Subjectivity and the Commons. *Antipode*, 44(4), 1247–1267. https://doi.org/10.1111/j.1467-8330.2011.00954.x
- Jiménez-Martínez, N. M., García-Barrios, R. (2020). The zero waste university program in Mexico: A model for grassroots innovations in sustainability. *Sustainability* (*Switzerland*), 12(22), 1–12. https://doi.org/10.3390/su12229444
- Jones, E. M., Tansey, E. M. (Eds) (2015). The Development of Waste Management in the UK c.1960–c.2000. *Wellcome Witnesses to Contemporary Medicine*, vol. 56. London: Queen Mary University of London.
- Jorgensen, B., Krasny, M., Baztan, J. (2021). Volunteer beach cleanups: civic environmental stewardship combating global plastic pollution. *Sustainability Science*, *16*(1), 153–167. https://doi.org/10.1007/s11625-020-00841-7
- Kaza, S., Yao, L., Bhada-Tata, P., Van Woerden, F. (2018). *What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050*. Urban Development Series. Washington, DC: World Bank.
- KBT. (n.d.) *Our History*. Accessed 2020-10-15 at https://www.keepbritaintidy.org/ourhistory
- KBT. (2018). *Litter in England. The Local Environmental Quality Survey 2017/2018.* Keep Britain Tidy. Available at: https://www.keepbritaintidy.org/news/survey-reveals-litterincrease

- Kemp, R., Schot, J., Hoogma, R. (1998). Regime shifts to sustainability through processes of niche formation: The approach of strategic niche management. *Technology Analysis & Strategic Management*, 10(2). https://doi.org/10.1080/09537329808524310
- Kennedy, G. (2007). *An ontology of trash: the disposable and its problematic nature.* Sate University of New York Press.
- Kincheloe, J. L., McLaren, P. (2011). Rethinking critical theory and qualitative research. In Hayes, K., Steinberg, S. R., Tobin, K. (Eds). *Key Work in Critical Pedagogy.* Sense Publishers.
- King, M. F., Gutberlet, J. (2013). Contribution of cooperative sector recycling to greenhouse gas emissions reduction: a case study of Ribeirão, Brazil. *Waste Management* 33: 2771– 2780. Lee
- Kinney, P. (2017). Walking Interviews. University of Surrey. social research UPDATE, 67, 1–4.
- Kirby, P. W., Lora-wainwright, A. (2014). Exporting harm, scavenging value: transnational circuits of e-waste between Japan, China and beyond. Area, 47(1), 40–47. https://doi.org/10.1111/area.
- Kirstein, I. V., Wichels, A., Gullans, E., Krohne, G., Gerdts, G. (2019). The plastisphere Uncovering tightly attached plastic "specific" microorganisms. *PLoS ONE*, *14*(4), 1–17. https://doi.org/10.1371/journal.pone.0215859
- Kirwan, J., Ilbery, B., Maye, D., Carey, J. (2013). Grassroots social innovations and food localisation: An investigation of the Local Food programme in England. *Global Environmental Change*, 23(5), 830–837. https://doi.org/10.1016/j.gloenvcha.2012.12.004
- Kramer, K. (2012). User Experience in the Age of Sustainability: A Practitioner's Blueprint. Morgan Kaufmann.
- Kristeva, J. (1982). Power of Horror: An Essay on Abjection. Columbia University Press.
- Lai, K. Y., Sarkar, C., Kumari, S., Ni, M. Y., Gallacher, J., Webster, C. (2021). Calculating a national Anomie Density Ratio: Measuring the patterns of loneliness and social isolation across the UK's residential density gradient using results from the UK Biobank study. *Landscape and Urban Planning*, 215(March), 104194. https://doi.org/10.1016/j.landurbplan.2021.104194
- Lane, R. (2011). The Waste Commons in an Emerging Resource Recovery Waste Regime: Contesting Property and Value in Melbourne's Hard Rubbish Collections. *Geographical Research*, 49(4), 395–408. https://doi.org/10.1111/j.1745-5871.2011.00704.x
- Leggett, W. (2014). The politics of behaviour change: Nudge, neoliberalism and the state. *Policy and Politics*, 42(1), 3–19. https://doi.org/10.1332/030557312X655576

- Lepawsky, J., Araujo, E., Davis, J. M., Kahhat, R. (2017). Best of two worlds? Towards ethical electronics repair, reuse, repurposing and recycling. *Geoforum*, *81*, 87–99. https://doi.org/10.1016/j.geoforum.2017.02.007
- Levidow, L., Raman, S. (2019). Metamorphosing waste as a resource: Scaling waste management by ecomodernist means. *Geoforum*, *98*, 108–122. https://doi.org/10.1016/j.geoforum.2018.10.020
- Levidow, L., Raman, S. (2020). Sociotechnical imaginaries of low-carbon waste-energy futures: UK techno-market fixes displacing public accountability. *Social Studies of Science*, *50*(4), 609–641. https://doi.org/10.1177/0306312720905084
- LGA. (2014). Waste management case studies: Recycling Cheshire West and Chester. Local Government Association. Available at: https://www.local.gov.uk/case-studies/waste-management-case-studies-recycling-cheshire-west-and-chester
- Linebaugh, P. (2008). *The Magna Carta Manifesto. Liberties and Commons for All.* University of California Press.
- Linebaugh, P. (2012). *Enclosure from the Bottom Up.* In D. Bollier, S. Helfrich. (Eds.) *The Wealth of the Commons. A World Beyond Market & State.* Levellers Press.
- Longhurst, N. (2015). Towards an "alternative" geography of innovation: Alternative milieu, socio-cognitive protection and sustainability experimentation. *Environmental Innovation and Societal Transitions*, *17*, 183–198. https://doi.org/10.1016/ j.eist.2014.12.001
- Lovejoy, L., E. (1912). Garbage and Rubbish. *Proceedings of the Academy of Political Science in the City of New York*, Vol. 2, No. 3. National Housing Association (Apr., 1912), pp. 62-69.
- Luckin, D., Sharp, L. (2003). Sustainable Development in Practice Community Waste Projects in the UK. *Project Report. University of Bradford*.
- Luckin, D., Sharp, L. (2004). Remaking local governance through community participation? The case of the UK community waste sector. *Urban Studies*, *41*(8), 1485–1505. https://doi.org/10.1080/0042098042000226966
- Luckin, D., Sharp, L. (2005). Exploring the community waste sector: Are sustainable development and social capital useful concepts for project-level research? *Community Development Journal*, 40(1), 62–75. https://doi.org/10.1093/cdj/bsi007
- Lund, C. (2014). Of What is This a Case?: Analytical Movements in Qualitative Social Science Research. *Human Organization, 73*(3). https://doi.org/10.17730/humo.73.3.e35q482014x033l4

- Martin, C. J., Upham, P., Budd, L. (2015). Commercial orientation in grassroots social innovation : Insights from the sharing economy. *Ecological Economics*, *118*, 240–251. https://doi.org/10.1016/j.ecolecon.2015.08.001
- Marx, K. (1867). *Capital: A Critique of Political Economy.* (Engels Ed.) Verlag von Otto Meisner.
- Mattei, U. (2012). First Thoughts for a Phenomenology of the Commons. In D. Bollier, S. Helfrich. (Eds.) The Wealth of the Commons. A World Beyond Market & State. Levellers Press.
- McCarthy, J., Sánchez, E. (2019). *The 'Attenborough Effect' Is Causing Plastic Pollution to Plummet.* Global Citizen. Accessed 2021-09-02 at https;//www.globalcitizen.org/en/content/Attenborough-effect-plastics/

McCrone, D. (2017). The New Sociology of Scotland. Sage.

- McGuigan, J. (2014). The Neoliberal Self. *Culture Unbound: Journal of Current Cultural Research*, *6*(1), 223–240. https://doi.org/10.3384/cu.2000.1525.146223
- Miller, E. (2010). Solidarity economy: Key concepts and issues. In Kawano, E., Masterson, T., Teller-Ellsberg, J. (Eds.) *Solidarity economy I: Building alternatives for people and planet.* Center for Popular Economics.
- Moore, J. E. (1995). A History of Toy Lending Libraries in the United States Since 1935. *Master's Research Paper*. Retrieved from http://eric.ed.gov/?id=ED390414%5Cnhttp://files.eric.ed.gov/fulltext/ED390414.pdf
- Moore, S. A. (2012). Garbage matters: Concepts in new geographies of waste. *Progress in Human Geography*, *36*(6), 780–799. https://doi.org/10.1177/0309132512437077
- Moore, S. A., Arefin, M. R., Rosenfeld, H. (2018). Generating anxiety, short-circuiting desire: Battery waste and the capitalist phantasy. *Environment and Planning D: Society and Space*, *36*(6), 1081–1100. https://doi.org/10.1177/0263775818777249
- Moreira, S., Fuster Morell, M. (2020). Food Networks As Urban Commons: Case Study of a Portuguese "Prosumers" Group. *Ecological Economics*, *177*(June), 106777. https://doi.org/10.1016/j.ecolecon.2020.106777
- Murphy, A. K. (2012). "Litterers": How Objects of Physical Disorder Are Used to Construct Subjects of Social Disorder in a Suburb. *Annals of the American Academy of Political and Social Science*, 642(1), 210–227. https://doi.org/10.1177/0002716212438210
- Murray, R. (1999). Creating Wealth from Waste. Demos Publishing.
- Nieto-Romero, M., Valente, S., Figueiredo, E., & Parra, C. (2019). Historical commons as sites of transformation. A critical research agenda to study human and more-than-human

communities. *Geoforum*, 107(September), 113–123. https://doi.org/10.1016/j.geoforum.2019.10.004

- No Place for Litter. (n.d.). *Case Studies*. Accessed 2021-11-17 at https://www.noplaceforlitter.org./case-studies/
- O'Brien, M. (2008). A crisis of waste? Understanding the rubbish society. Routledge.
- O'Neil, S., Nicholson-Cole, S. (2009). "fear won't do it": Promoting positive engagement with climate change through visual and iconic representations. *Science Communication 30*(3), p. 355-379.
- OECD. (2019). OECD Environmental Performance Reviews: Turkey highlights 2019. Organisation for Economic Co-operation and Development. Available at: https://wwwoecd-org.uea.idm.oclc.org/turkey/oecd-environmental-performance-reviews-turkey-2019-9789264309753-en.htm
- Olin Wright, E. (2010). Envisioning Real Utopias. Verso.
- Ornetzeder, M., & Rohracher, H. (2013). Of solar collectors, wind power, and car sharing: Comparing and understanding successful cases of grassroots innovations. *Global Environmental Change*, *23*(5), 856–867. https://doi.org/10.1016/j.gloenvcha.2012.12.007
- Ostrom, E. (1990). *Governing the Commons. The Evolution of Institutions for Collective Action.* Cambridge University Press.
- Ostrom, E. (2009). Beyond Markets and States: Polycentric Governance of Complex Economic Systems. *Workshop in Political Theory and Policy Analysis,* Indiana University, Bloomington, and Center for the Study of Institutional Diversity, Arizona State University, Tempe, AZ
- Ostrom, E., Walker, J. M. (1989). Communication in a commons: Cooperation with external enforcement. *Laboratory Research in Political Economy*, 287–322.
- Pansera, M., Rizzi, F. (2020). Furbish or perish: Italian social cooperatives at a crossroads. *Organization*, 27(1), 17–35. https://doi.org/10.1177/1350508418760980
- Parker, M., Cheney, G., Fournier, V., Land, C. (2014). *The Routledge Companion to Alternative Organisation.* Routledge.
- Peck, J. (2010). Zombie neoliberalism and the ambidextrous state. *Theoretical Criminology*, 14(1), 104–110. https://doi.org/10.1177/1362480609352784
- Payson, J. (2012). My Rocky Road to the Commons. In D. Bollier, S. Helfrich. (Eds.) *The Wealth of the Commons. A World Beyond Market & State.* Levellers Press.
- Pohlmann, A., & Colell, A. (2020). Distributing power: Community energy movements claiming the grid in Berlin and Hamburg. *Utilities Policy*, *65*(January), 101066.

- Polanyi, K. (1944). *The Great Transformation: The Political and Economic Origins of Our Time.* Beacon Press.
- Pratt, L. A. (2011). Decreasing Dirty Dumping? A Reevaluation of Toxic Waste Colonialism and the Global Management of Transboundary Hazardous Waste. *William and Mary Environmental Law & Policy Review*, *35*(2).
- Price, C. (2018). The Community Food Movement in the United Kingdom: 1960s to Present. *Environment & Society Portal, Arcadia* (Autumn 2018), no. 30. Rachel Carson Center for Environment and Society.
- Raven, R., Bosch, S. Van den, Weterings, R. (2010). Transitions and strategic niche management: towards a competence kit for practitioners. *International Journal of Technology Management*, 51(1), 57. https://doi.org/10.1504/IJTM.2010.033128
- Repair Café. (n.d.). Visit. Accessed 2021-03-04 at https://repaircafe.org./en/visit
- Reuse Network. (n.d.). Our members. *Reuse Network.* Accessed 2021-03-03 at https://reuse-network.org.uk/our-members/about-our-members/
- Reuseful. (n.d.). *Scrapstores directory*. Accessed 2021-03-05 at https://reuseful.org/scrapstores-directory
- Robbins, C., Rowe, J. (2002). Unresolved responsibilities: Exploring local democratisation and sustainable development through a community-based waste reduction initiative. *Local Government Studies*, 28(1), 37–58. https://doi.org/10.1080/714004128
- Roelvink, G. (2020). Framing essay: diverse economies methodology. In Gibson-Graham, J. K., Dombroski, K. (Eds.). *The Handbook for Diverse Economies.* Edward Elgar Publishing.
- Ross, T., Mitchell, V. A., May, A. J. (2012). Bottom-up grassroots innovation in transport: Motivations, barriers and enablers. *Transportation Planning and Technology*, *35*(4), 469–489. https://doi.org/10.1080/03081060.2012.680820
- Salamon, L. M., Sokolowski, S. W. (2016). Beyond Nonprofits: Re-Conceptualising the Third Sector. *International Society for Third Sector Research*. Volume (2016) 27: 1515-1545.
- Samers, M. (2005). The myopia of "diverse economies", or a critique of the "informal economy." *Antipode*, *37*(5), 875–886. https://doi.org/10.1111/j.0066-4812.2005.00537.x
- Sandra, J., Crespo, B., Andrés, C., Arcieri, O., Hassan, V. M. (2016). Foucault and Homosexuality: From Power Relation to Practice of Freedom. *Revista de Derecho*, 46, 111–130.
- Sarmiento, E. (2020). Field methods for assemblage analysis: tracing relations between difference and dominance. In Gibson-Graham, J. K., Dombroski, K. (Eds.). *The Handbook for Diverse Economies.* Edward Elgar Publishing.

- Sayer, A., Storper, M. (1997). Guest Editorial Essay. *Environment and Planning D: Society and Space*, *15*(1), 1–17. https://doi.org/10.1068/d150001
- Schmid, N. (2019). Degrowth and postcapitalism: Transformative geographies beyond accumulation and growth. *Geography Compass* 13(11).
- Schmid, B., & Smith, T. S. J. (2020). Social transformation and postcapitalist possibility: Emerging dialogues between practice theory and diverse economies. *Progress in Human Geography*, (February), 1–23. https://doi.org/10.1177/0309132520905642
- Seadon, J. K. (2010). Sustainable waste management systems. *Journal of Cleaner Production*, 18(16–17), 1639–1651. https://doi.org/10.1016/j.jclepro.2010.07.009
- Seyfang, G. (2010). Community action for sustainable housing: Building a low-carbon future. *Energy Policy*, *38*(12), 7624–7633. https://doi.org/10.1016/j.enpol.2009.10.027
- Seyfang, G., Haxeltine, A. (2012). Growing grassroots innovations: exploring the role of community-based initiatives in governing sustainable energy transitions. *Environment and Planning C: Government and Policy, 30*, 381–400. https://doi.org/10.1068/c10222
- Seyfang, G., Longhurst, N. (2013). Desperately seeking niches: Grassroots innovations and niche development in the community currency field. *Global Environmental Change*, 23(5), 881–891. https://doi.org/10.1016/j.gloenvcha.2013.02.007
- Seyfang, G., Park, J. J., Smith, A. (2013). A thousand flowers blooming? An examination of community energy in the UK. *Energy Policy*, 61, 977–989. https://doi.org/10.1016/j.enpol.2013.06.030
- Seyfang, G., Smith, A. (2007). Grassroots innovations for sustainable development: Towards a new research and policy agenda. *Environmental Politics*, *16*(4), 584–603. https://doi.org/10.1080/09644010701419121
- Sharp, D. (2020). Sharing cities: new urban imaginaries for diverse economies. In Gibson-Graham, J. K., Dombroski, K. (Eds.). *The Handbook for Diverse Economies.* Edward Elgar Publishing. Massachusetts, US.
- Sharp, L., Luckin, D. (2006). The community waste sector and waste services in the UK: Current state and future prospects. *Resources, Conservation and Recycling*, 47(3), 277– 294. https://doi.org/10.1016/j.resconrec.2005.12.001

Shakespeare, W. (1603). Hamlet.

Slater, R., Frederickson, J., Yoxon, M. (2010). Unlocking the Potential of Community Composting. *Full project report. Department for Environment Food and Rural Affairs*, London, UK.

- Smith, A., Fressoli, M., Thomas, H. (2014). Grassroots innovation movements: challenges and contributions. *Journal of Cleaner Production*, *63*, 114–124. https://doi.org/10.1016/j.jclepro.2012.12.025
- Stahl, T. (2013). What is Immanent Critique? SSRN Electronic Journal, 1–20. https://doi.org/10.2139/ssrn.2357957
- Stake, R., E. (2003). Case Studies. In Denzin, N. K., Lincoln Y. S., (Eds.). *Strategies of qualitative inquiry*. Sage.
- Storrier, K. L., McGlashan, D. J. (2006). Development and management of a coastal litter campaign: The voluntary coastal partnership approach. *Marine Policy*, *30*(2), 189–196. https://doi.org/10.1016/j.marpol.2005.01.002
- The Small Project. (n.d.). *The Small Project is a baby clothes library based at Oasis Playspace in London.* Accessed 2021-11-17 at https://www.thesmallproject.org.uk/about
- Thompson, M. (1979). Rubbish Theory: The Creation and Destruction of Value. Pluto Press.
- Tremblay, C., Gutberlet, J., Peredo, A. M. (2010). United We Can: Resource recovery, place and social enterprise. *Resources, Conservation and Recycling*, *54*(7), 422–428. https://doi.org/10.1016/j.resconrec.2009.09.006
- UN. (2017). Fact sheet: marine pollution. United Nations.
- UNCED. (1992). Agenda 21, Rio Declaration. United Nations Conference on Environment and Development.
- UNEP. (2011). Basel Convention. On the control of transboundary movements of hazardous wastes and their disposal. United Nations Environmental Programme.
- Ustohalova, V. (2019). Management and export of wastes: Human health implications. *Encyclopaedia of Environmental Health*, 2(4). https://doi.org/10.1016/B978-0-444-63951-6.00573-8
- Valenzuela, F., Böhm, S. (2017). Against wasted politics: A critique of the circular economy, 17(1), 23–60.
- van Veelen, B., Hasselbalch, J. (2020). Power and politics in plastics research: A critique of 'Whither plastics? petrochemicals, plastics and sustainability in a garbage-riddled world.' *Energy Research and Social Science*, *61*(January), 101445. https://doi.org/10.1016/j.erss.2020.101445
- Vivero-pol, J. L. (2017). Food as Commons or Commodity? Exploring the Links between Normative Valuations and Agency in Food Transition *Sustainability*, *9*(442). https://doi.org/10.3390/su9030442
- Werner, S., Budziak, A., van Franeker, J., Galgani, F., Hanke, G., Maes, T., Matiddi, M., Nilsson, P., Oosterbaan, L., Priestland, E., Thompson, R., Veiga, J., Vlachogianni, T.

(2016). *Harm caused by Marine Litter*. Marine Litter - Thematic Report. European Commission.

- Wheeler, K. (2014). Nice save: The moral economies of recycling in England and Sweden. *Environment and Planning D: Society and Space*, *32*(4), 704–720. https://doi.org/10.1068/d18912
- White, R., Stirling, A. (2013). Sustaining trajectories towards Sustainability: Dynamics and diversity in UK communal growing activities. *Global Environmental Change*, 23(5), 838–846. https://doi.org/10.1016/j.gloenvcha.2013.06.004
- WHO. (2021). *Children and digital dumpsites: e-waste exposure and child health.* World Health Organization.
- Williams, C. C., Windebank, J. (2003). Alternative Employment Spaces. In Leyshon, A., Lee, R., Williams, C. C. (Eds.). *Alternative Economic Spaces*. Sage.
- Williams, I. D., Curran, T., Schneider, F. (2012). The role and contribution of the third sector in terms of waste management and resource recovery. *Waste Management*, 32(10), 1739–1741. https://doi.org/10.1016/j.wasman.2012.06.019
- Williams, M. J. (2016). Justice and care in the city: uncovering everyday practices through research volunteering. *Area*, 48(4), 513–520. https://doi.org/10.1111/area.12278
- Williams, R. 1976. Keywords: A vocabulary of culture and society. Oxford University Press.
- Willis, K., Maureaud, C., Wilcox, C., Hardesty, B. D. (2018). How successful are waste abatement campaigns and government policies at reducing plastic waste into the marine environment? *Marine Policy*, *96*(December 2017), 243–249. https://doi.org/10.1016/j.marpol.2017.11.037
- Wilson, D. C., Velis, C., Cheeseman, C. (2006). Role of informal sector recycling in waste management in developing countries. *Habitat International* 30: 797–808.
- Wollaston, S. (2020). 'It was so gross, I nearly cried': Meet the UK's litter-picking army fighting our rising tide of filth. *The Guardian*. Accessed 2021-03-04 at https://www.theguardian.com/environment/2020/jul/21/it-was-so-gross-i-nearly-cried-meet-the-uks-litter-picking-army-fighting-our-rising-tide-of-filth
- Yates, L. (2015). Rethinking Prefiguration: Alternatives, Micropolitics and Goals in Social Movements. *Journal of Social, Cultural and Political Protest, 14*(1). https://doi.org/10.1080/14742837.2013.870883
- Yates, L. (2020). Prefigurative Politics and Social Movement Strategy: The Roles of Prefiguration in the Reproduction, Mobilisation and Coordination of Movements. *Political Studies*. https://doi.org/10.1177/0032321720936046

- Zapata Campos, M. J., Zapata, P. (2017). Infiltrating citizen-driven initiatives for sustainability. *Environmental Politics*, *26*(6), 1055–1078. https://doi.org/10.1080/09644016.2017.1352592
- Zapata Campos, M. J., Zapata, P., Ordoñez, I. (2020). Urban commoning practices in the repair movement: Frontstaging the backstage. *Environment and Planning A*, *52*(6), 1150–1170. https://doi.org/10.1177/0308518X19896800
- Žižek, S. (2006). *The parallax view*. MIT Press.
- Zückert, H. (2012). *The Commons: A Historical Concept of Property Rights.* In D. Bollier, S. Helfrich. (Eds.) *The Wealth of the Commons. A World Beyond Market & State.* Levellers Press.

Appendices

Appendix 1: Survey questionnaire

Hi!

Thank you for following the link to this survey. Before you start answering the questions, I would just like to briefly **introduce** myself and this research project. My name is Sara Skarp. My research is centred on waste and community organisation, as part of my PhD at the University of East Anglia. The project is funded by my university, but also by the Norfolk County Council.

The **aim** of the overall research project is to find new and exciting ways of working with waste and also to be able to advise local authorities and community groups alike on sustainability, waste and community action. The purpose of this survey is to investigate the community waste field in the UK, to understand its scope and character better. The research is my own and is not influenced by any external organisation or funder.

You are relevant to my research if you are a community or informal group which focuses on working together to prevent or deal with waste. This project includes all kinds of waste prevention activities as well as waste, **except food waste**.

I have tried to keep the survey concise and short, while still allowing for both breadth and depth. It shouldn't take more than XX minutes.

Please read the confidentiality information below:

Your participation in this research project is completely voluntary. You may decline to participate, or leave blank any questions you don't wish, or are unable, to answer. There are no known risks to participation. You will have a choice to give your personal name. If you do, it will only be known to the research team and will never be published. You will also have a choice to be public with the group/organisation you are representing. If you choose to not be public, the research team will still know which group/organisation you are representing, but you will be anonymous in the event of publication. The data will only be used for the stated purposes. It will be securely stored and will only be accessible to the research team. You may withdraw your answer until January 1st, 2019.

If you have any questions or comments, please email <u>s.skarp@uea.ac.uk</u>. If you'd like, please share this survey with other groups: LINK Thank you! Sara

Introduction

In the questionnaire that follows, the term 'group' will be used to describe the organisation/project/group that you represent. I do not assume that this is what your group calls itself, I only do so for practical reasons.

Please answer the questions **to the best of your knowledge**, and as objectively and honestly as you can. If there are questions that you can't or don't want to answer, leave these blank or choose the corresponding option. Please keep in mind that I am trying to capture a broad sector, which is why some questions might seem strange or simply don't fit what your group or organisation is or does. If this is the case, please answer as accurately as possible or leave blank.

1. What is the name of the group that you are representing? (If you are a group that runs a project, give the name of the group)

Name:

Organisation, history and geography

2. Which year was your group set up? If you are unsure, give an estimate.

Year:

- 3. Which of the following best describes your group now? Please tick all that apply.
 - O Informal, independent group
 - O Informal group that is part of larger formal network/organisation
 - O Unincorporated association
 - O Development trust
 - O Limited company with a social purpose
 - O Community benefit society
 - O Community interest company
 - O Charitable social enterprise
 - O Charitable incorporated organisation
 - O Faith organisation
 - O For-profit company
 - O Don't know
 - O Other, please specify:

- 4. Based on your answer for the previous question, what is the reason your group has chosen this form?
 - O Please **briefly** describe:
 - O There is no particular reason
 - O Don't know
- 5. Why was the group set up?
 - O Please **briefly** describe:
 - O Don't know
- 6. Who set up the group? Please tick all that apply.
 - O An individual
 - O Two or more individuals
 - O A pre-existing community group, please specify:
 - O Two or more pre-existing community groups, please specify:
 - O A for-profit company, please specify:
 - O A non-profit company, please specify:
 - O A local authority, please specify:
 - A network, please specify:
 - O Don't know
 - O Other, please specify:
- 7. To what extent are the following involved in your group? Please select one answer on each row only.

	Not involved at all	Slightly involved	Fairly involved	Involved	Very involved	Completely involved in all aspects	Don't know
A larger non- profit organisation							
A local authority							
A for-profit company							

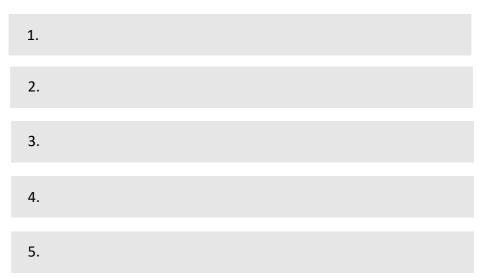
8. In which UK county/region are you based?

County/region:

- 9. In which type of geographic area does your group operate?
 - O Urban
 - O Rural
 - O Suburban
 - O A mix
- 10. How is your group funded? Please tick **up to three** of your group's largest funding sources.
 - O Membership fees
 - O Donations
 - O Grant funding
 - O Prize funding
 - O Loans
 - O Commercial sponsorships
 - O Income from waste related activities, for example sales, collection fees, lending fees etc.
 - O Funded by larger organisation that the group is part of
 - O Funded by network that the group is part of
 - O Not funded
 - O Other, please specify:
- 11. How has funding changed for your group in the past five years?
 - O We have acquired more funding
 - O Our funding has decreased
 - O Our funding has varied over time
 - Our funding has not changed
 - O Don't know

Aims and activities

12. What are your group's stated aim/s? Please **briefly** describe **up to five** aims.



- 13. Does your group have any other informal aims?
 - O Yes, please **briefly** describe:
 - O No
 - O Don't know
- 14. To what extent is your group's work **related** to waste (waste understood as discarded items or materials as well as the prevention thereof)? Please circle the appropriate box.

Not related	Slightly	Fairly	Related	Very	Completely	Don't know
at all	related	related		related	related	

- 15. Which of the following describes your group's (waste or waste prevention-related) activities best? Please tick all that apply.
 - O Charity shop
 - O Reuse shop
 - O Not-for-profit second hand shop
 - O Cooperative zero waste shop (packaging etc.)
 - O Not-for-profit zero waste shop (packaging etc.)
 - O Library of things
 - O Tool library
 - O Clothing library

- O Toy library
- O Appliance library
- O Book library
- O Peer-to-peer gifting platform/network
- O Peer-to-peer lending platform/network
- O Peer-to-peer renting platform/network
- O Community recycling group
- O Community garden waste composting group
- O Community biogas/incinerator group
- O Community scrapyard
- O Community wood recycling group
- O Open-source/collaborative digital tool: map
- O Open-source/collaborative digital tool: app
- O Open-source/collaborative digital tool: website
- O Open-source/collaborative digital tool: social media
- Reuse/recycling centre/hub
- O Workshop organiser: repair
- O Workshop organiser: upcycling
- O Workshop organiser: DIY
- Voluntary litter-picking group
- O Other, please specify:
- 16. Does any of your activities involve someone purchasing (by a financial transaction) anything from you? If 'No' or 'Don't know', please moven on to Question 18.
 - O Yes
 - O No
 - O Don't know
- 17. If you answered yes to the previous question, what happens with this money? Please tick all that apply.
 - O It pays for bills
 - O It pays for purchasing new items to sell
 - O It pays for new capital items
 - O It pays for salaries
 - O It goes as profit to owners
 - O It goes as profit to members
 - O Prefer not to say
 - O Don't know
 - O Other, please specify:

Successes and challenges

18. To what extent does your group feel that you are achieving your aim/s? Please circle the appropriate number/text: 1 is not at all, 5 is completely.

1	2	3	4	5	Don't know	We do not have aims

- 19. Does your group feel that you have had any other successes, beyond your aims?
 - Yes, please briefly describe:
 No
 Don't know
- 20. What, if any, are your group's main challenges? (these can be in relation to your aims or anything else) Please **briefly** describe **up to five** challenges.

1.		
2.		
3.		
4.		
5.		

21. What do you think you need in order to help you overcome any of these challenges? Please **briefly** describe one or a few example/s.

22. If you have any examples of challenges you faced in the past, but have overcome, please tell us about these here:

Members and engagement

23. Does your group have any of the following? Please indicate approximately how many in total for each category – you can count the same person more than once, if applicable. If you have other types of supporters, please specify the type and number in the three last rows.

Formal members	
Regularly active participants	
Paid staff	
Volunteer staff	

- 24. Has your group experienced any changes in participation in the past five years?
 - O Yes, please **briefly** describe:
 - O No
 - O Don't know
- 25. What is your group's experience in recruiting to your group? Please circle the appropriate number/text: 1 is very easy and 5 is very difficult.

1		2	3	4	5	Don't know	We don't recruit
---	--	---	---	---	---	------------	------------------

26. Based on your answer to the previous question, why is it easy or difficult to recruit?

- Please **briefly** describe:
- O Don't know
- O We don't recruit

- 27. Has your group had any influence on the people in or around the area your group works in, beyond your aims?
 - O Yes, please **briefly** describe:
 - O No
 - O Don't know
- 28. Has your group had any influence on local authorities, beyond your aims?
 - O Yes, please **briefly** describe:
 - O No
 - O Don't know
- 29. How important would you say that working together is in your group? Please circle the appropriate number/text: 1 is not important at all, 5 is completely vital.

Not important at all	Slightly important	Important	Very important	Completely vital	Don't know
----------------------------	-----------------------	-----------	-------------------	---------------------	------------

- 30. Does your group work together with other groups/organisations? Please tick all that apply.
 - O Local authorities
 - Other local group/s
 - O Other group/s with similar focus to ours
 - O Network/s
 - O School/s
 - O University
 - O Regional development agency
 - O No
 - O Other, please specify:

A few more details...

- 31. Does your group have a webpage?
 - O Yes:
 - O No

32. What is your role in the group?

Role:

- 33. What is your name?
 - O Prefer not to say
 - O Name:
- 34. Would your group like to be kept updated on the results of the survey?
 - O No
 - Yes, please provide an email address (which will not be known or given to any others than the research team):
- 35. Is there anything else your group would like to say, about this survey or the research it is part of; about your group's work; about waste, community action or sustainability in general; or anything else related to these?

Appendix 2: Interview guide

Note: This example interview guide is specifically for organisers of Glanhewch Taifon. All guides were centred on the same themes, but differed depending on what the interviewee was assumed to know due to their position.

- Warm up
 - \circ About the area
 - \circ How long they've lived here
- Organisation
 - o History
 - o Their role
 - How it's set up
 - \circ Activities
- Aims and challenges
 - \circ What are the immediate aims
 - $\circ \quad \text{If they've been met} \quad$
 - \circ What are the challenges
- Reasons for joining/starting
 - \circ Why they joined/started
 - o If the reasons have changed
- Activities
 - What participating makes them feel
 - o What their favourite part is
- Personal impacts
 - o Impacts on everyday life
 - Positive or negative
- Impacts on Casdwr/other
 - o Impacts on area
 - Impacts on society
 - o Anything else
- End goal
 - What the end goal is for the group
 - $\circ\quad$ What it would mean to reach the end goal
- Collaboration
 - \circ Working with other groups
 - Working with LAs
- Thoughts on
 - Working together to solve a problem
 - o The responsibility of citizens/local communities
 - \circ Community
 - \circ Sustainability
 - $\circ \quad \text{The future} \quad$

Appendix 3: Field diary excerpts

Excerpt 1

Adapted from an audio-recorded field diary, after first visit with Glanhewch Taifon.

On a side note, personally I think I have brain fog, I don't know what's wrong with me, but I think I do. So, when I came back to the meet-up point, we collected all the bags in one pile, and I think it was 16 bags of refuse and four bags of recycling. My bag was quite small, I had a lot of small stuff in it. I talked to another PhD student who was there for the first time. He's doing his PhD on health and streets. And there was another family there that I talked to. And I took their picture, everyone said "bye" and "thank you" and then some of us continued on to a café. On the way we met another guy called Dan that runs another litter-picking group. Anyway, we talked, everyone talked, it was quite a big group of people, maybe 10-12 people that had coffee at this little place. And it was very nice, very lovely. It was quite nice to see... So some of them were from GT, some were from other groups. And it was really nice to see how they all got together, and it was like something I've never experienced before – semi-strangers that only know each other through their neighbourhood, and through taking part in these things, coming together, and it was quite lovely to see. Everyone was happy, and everyone was talking, and they were talking about things they could do together, and joint litter-picks, and joint events and everything. It was very nice.

In terms of content, and in terms of stuff that people have told me during the day – someone said that even if we pick litter, it hasn't changed anything, people still litter. And that's quite interesting, that they still keep trying, they still pick litter, they don't give up. The goal of the GT group is not necessarily different to other litter-picking groups, but it definitely goes beyond what other groups are doing. So they have a quite a transformative vision for their neighbourhood, they want to green it, they want to work around air pollution, reduce speed, reduce traffic, community cohesion, all the stuff that sort of makes an area more liveable. And this is really why I'm interested in this group, and they work with so many different groups and so many different projects. They work with the other litter-picking groups, and another group focused on greening. They're promoting active travel and stuff like that. They're also working with the Eden Project, I don't remember where it is, but it's about... The Big Lunch Project – was it called something like that? Something where they encourage

neighbourhoods to go and have lunch together. They're quite involved in like trying to lobby the city, to improve various things, to put up bins, to do all sorts of stuff.

It's quite interesting to sort of just be a spectator and be a listener, and see how their... even today, even if I only joined them for four hours, to see how they work, how they evolved. At one point, they were talking about how they could better organise themselves and they were like "Aw yeah that's such a great idea", really encouraging each other, and it was a very open environment. Gosh, I heard so many things today and my brain is a bit overloaded. It was quite interesting, I think a lot of these people, they don't promote it, but they really care about that it's a community, that it's their community. They didn't talk about it like that, I mean, I'm sure that if I would have probed, or asked, they would have told me, but they didn't talk about community. I don't think anyone actually said something about community, which is interesting, because it's more like they do community, rather than talk about community, which is very interesting in a way, because generally it's a lot of talk about community, and not necessarily... I'm sure there's action even where there's talk, but it's interesting, because on an academic level, all we do is talk about community, I mean it's a semi-contested concept anyway, but yeah, it's nice to see it lived, practiced, done, performed.

Excerpt 2

Adapted from field diary written in a café in Thornbridge

This place is amazing. It's so tiny, but somehow there's just more people coming out of nowhere. And I constantly see people saying hi to each other and chatting and hugging. It seems like a lot of people know each other. Stephanie says that Thornbridge is like that, for good and bad, that everybody knows everybody's business. She told me about this fire that happened last year or something, where a couple got their house completely destroyed. That same evening, the village had already found some place for them to stay, as well as clothes and other necessities. She meant that this was a sign that Thornbridge has a strong community and that there is a willingness to help each other. At the same time, everyone is of course aware of that there is this rift in the village as well – somehow caring about the environment is upsetting to a small subset of the population (apparently the indigenous

Thornbridgians, whose families have lived here a long time, which apparently means that you're entitled to deciding how other people should deal with their waste...). Anyway.

Walking in this town is difficult, because the pavements are not really pavements, but about 10 cm broad stones, which are meant to keep pedestrians safe. It's not that bad though, since there's isn't much traffic here anyway (there is for sure cars and the odd bus and lorry, but not as much as you'd expect) – someone told me it was because this is not a throughway, which I don't quite understand, because I'm pretty sure you can get into Thornbridge from two directions [at a later point, I learnt that the other way merely goes into the hilly landscape]. The absence of traffic makes me wonder even more how on Earth this town can survive. Stephanie told me that she found it by a fluke, loved it so much, and then decided to stay. She's been here three years, I think she said. And other people have similar stories. And I'm not gonna lie, I was looking out over the hills yesterday and thought to myself 'I could write my thesis from here, Tim would love it". I mean, our life is in Norwich, but this place has something, which I almost can't put my finger on. It's in the atmosphere, just seeing people greeting each other, seeing people having errands to run in this TINY TOWN. The stores here also contribute – now I'm no capitalist, but they do, they give people a reason to leave their house even when it's wet and miserable. And the stores are fitting for this place as well some a bit alternative, antique stuff, minimalist designer clothes, a hardware store, a fancy wine store, and then of course Old & New and The Reuse Collective. It all forms a whole, which is maintained by the people here, and which maintains the atmosphere, that make the people want to maintain it even more. It seems, at least.

Appendix 4: Example of coding and categorisation matrix – TRC

Note: Only commoning features are exemplified. Abbreviations in parentheses are short interviewee codes.

Feature	Codes	Summary/comment	Relevance/contribution	Headline
Meeting a need	 TRC needs to educate the public about waste (TO, VA, GT, SA, ME, CO) TRC teaches people skills (ME, HC) TRC provides a needed waste service (TO, SA, YE, UF, CO, VA, HC, YE) TRC can be a model and example (TO, VA, GT, SA, CO) TRC creates job opportunities (TO, SA, HC, MA, EP, OM, VA) TRC was started out of a need for compost (VA, MA, OM, GT, EP) TRC helps unwanted things find new homes (ME, UF, EP) TRC puts recycling and waste on the agenda (YE, EP) One aim was to reduce waste of resources (MA, OM, CP) TRC attracts visitors and new residents to TB (ME, YE, GT) TRC is for people who are interested in living differently (VA, YE) TRC develops because there is a demand for it (MA, CO, OM) 	TRC was originally started to make compost out of people's garden waste. From there it developed into a community compost group. At the same time, an organic food store was opened, in which they also sold e.g. vegetables grown by the project using the compost they had created. After a few years, people started giving them things along with garden waste, and the project developed into taking people's unwanted items, as there was no formal recycling in the area. TRC now still provides an integral waste service, because non-kerbside recyclable items must be driven far away. TRC is also seen as an entity that should educate the public about reuse and recycling. It also teaches skills. TRC also creates employment in the area, which is rare, allowing for more people to stay. They also bring in visitors to TB, helping to keep it bustling. TRC is also seen as a model for how waste can be taken care of on a local scale. TRC has and continues to develop because people need it to – from compost to stuff, from informal to formal, etc.	 TRC meets multiple needs, for example providing a recycling and reuse service. They also hold workshops. Interestingly, there is not much talk of creating community, likely because the community is very strong in TB, or because TRC is old, or because it's seen as a result of community, rather as a potential activator of it. Nonetheless, workshops are organised to promote thrift, making, and reuse, and establish TRC more in the community. One objective of TRC is education. It is seen as something that the public needs, which is interesting, because it's kind of like saying that someone needs something without knowing it. What does this mean for the idea of meeting needs? Meeting e.g. the planet's needs, humanity's needs, but not necessarily the needs as defined by those who unwillingly 'get educated'. TRC can be an example or model, it also provides facilities for those who want to live differently. Prefiguration – creating the society we want now. 	TRC is a community reuse and recycling facility that provides services where LAs can't, educates the public about waste and creates employment in rural area
Bottom-up	 TRC was initiated by a small group of people (VA, MA, OM) Had help from external sources (MA, OM) People in the community are an important part of TRC (VA, GT, YE, TO) TRC helps other groups (TO, ME) 	TRC was started by a handful of dedicated individuals, who pushed through various hurdles. Now, TRC is still an integral part of the community and the people in the community are seen as integral to TRC. The community and staff have been consulted on important issues. TRC has had help from	 Interestingly, TRC maybe used to be more bottom up than it is now. This has likely come with formalisation. Losing factors like bottom up directionality and cooperation as organising mode can be seen as a potentially unavoidable side effect of formalising. So the question is – what is more 	TRC has lost some of its bottom-up- ness, but the community is still an integral part of it

	 Small grassroots groups can have important local impacts (OM, TO, GT) 	a few different external sources, but has always been run by those it's for. TRC has grown so much, that it has in turn started helping other groups and campaigns realise.	important? Prefiguration in the sense of organising social relations in regards to providing services and resources, or the aims the organisation sets out to achieve? Granted, TRC is not going from being an informal anarchist initiative to a capitalist, profit-hungry machine, nevertheless, the tendency and question therefore remain.	
Cooperation	 TRC works and networks with other groups (TO, VA, GT) Important to cooperate within teams (GT, HC, YE, CO, EP, MO) There have been conflicts in TRC (VA, SA) Working together is always challenging (TO, VA, EP) You need to have clear roles and team structures to work well together (YE, UF, CO) Cooperating with local stakeholders (GT, VA, OM) Shared responsibility for TRC (YE, MA) Sometimes it's better to be a small group (YE) TRC has sometimes been heavy for one person (VA, GT, SA) There has always been an us-and-them mentality in TB (UF, HC, GT, EP) The community is and needs to be an integral part of TRC (TO, ME, HC, VA, CO) You have to get along in small communities and projects in order to be successful (OM, SA) People help out when they're asked (ME, OM, TO) 	TRC has always relied on different levels of cooperation. It has gone through some tough times in terms of teamwork, but most of the people involved stuck through it. Group work is seen as really important, but also incredibly challenging at times. It's important to have clear roles, while understanding that you share responsibility. Cooperation is now fragmented, as it's become more and more formal. There is the board of trustees, which collaborates with each other and beyond. There is the staff, which collaborate, but are led by a yard manager and a chief executive. There are the volunteers who collaborate with staff and each other. For the area, TRC has had a divisive effect in the past. While uniting some in the quest for sustainable communities, it has alienated others who have viewed TRC:ers with suspicion. TRC also works with other groups and in networks.	 Cooperation is again something that has maybe diminished over time, from being an informal community group to being a more formalised charity that needs to adhere to regulations. Therefore, they can be seen as having 'had' to put in structure to lessen cooperation for cooperation's sake, and create a top-down, managerial approach to deal with increasing complexity. They report that collaboration has been challenging, and this is to be expected from all groups. Cooperation and collaboration and good will beyond the organisation itself is seen as crucial, but challenging, as there is a faction of TB that is incredibly anti-TRC. This is increasingly overcome by the fact that 'indigenous' people are getting involved in TRC. 	Cooperation and working together is important, but challenging, and has been fragmented as the organisation has formalised
Outside the market	 TRC has always needed grant funding (TO, MA, VA) Becoming a charity was guided by financial reasons (TO, VA, SA) Important to focus on the business side of TRC (TO, SA, MA, HC, YE, UF) Growing food was not financially viable (MA, EP, OM) 	TRC has, as it has become more and more formal, needed increasing amounts of funding. Grant funding has been instrumental in the past, and will continue to play a role in the future. TRC has changed from a community interest company to a charity, and did so for financial reasons.	• TRC is non-profit, but is increasingly guided by a capitalist logic of dealing with the business first, increasing profitability, and so on. This can be seen as a result of having a continuous pressure to make ends meet in order to continue to provide employment and a service. However, the fact remains that they are prioritising the	TRC is non-profit, but is increasingly driven by profit logics and business approaches

	 Café and shop in town make profit for TRC (VA, SA, YE, OM) Need to balance paid staff and unpaid volunteers (GT, TO, EP, SA) People need to pay something in order to commit (HC, ME) TRC used to be paid recycling credits by the council (MA, GT) Important for TRC founders, staff and users that it's non-profit (CO, ME, OM, UF, VA, YE) You need to balance community and business (YE, HC) Being non-profit and getting free stock has been seen as a business advantage (UF, MA, GT) 	As the organisation has formalised, so have the ideas and aims that guide it. Increasing cash flow, profitability, image, making more money etc, are all ideas that have started to guide TRC more. However, it remains important that TRC is non-profit, non-capitalist and true to its values and ethics, but this is increasingly sharing space in people's imaginaries alongside capitalist logics of profitability.	 running of the business over particular needs of individual staff or volunteer or users. TRC has been part of a social entrepreneurship programme in which the aim was to increase turnover. Uptown is spoken of as TRC's profit-making arm, keeping the yard alive. Again, it's very understandable, because all these group don't exist in a vacuum. The only thing is that they don't necessarily see it as pragmatism. They don't see it as 'we would love for it to be this way, but we have to deal with it this way'. 	
Alternative ownership		Alternative ownership is something that is not discussed in TRC. However, the service that TRC provides is not owned by the state or a privately owned company that withdraws profit. In this way, TRC could be construed as being communally owned by those who it's for, even though it's only a charity. The fact that items are donated freely and sold at a low cost also contributes to the loosening of the grip of ownership and guardedness around property. TRC also shares their knowledge freely and emphasises that they have many visitors who are interested in setting up similar projects in their home towns.	 Alternative ownership is very much a slippery fish, which seems to mean something one minute to mean something else the next. For TRC, alternative ownership is not necessarily practiced, because the way they can provide a recycling and reuse service is to sell things, which are owned and used by individuals. Like pointed out to the left, TRC exists for the community and expands, develops and changes much because of the community. Therefore, the service they provide can be seen as being owned, not in actual terms, by the community, and not by a council or a profit-driven company. Again, TRC adds in part to the loosening of the very definite edges of private property, by opening a space where property can become a fluent thing, which does not always require the exchange of money to be fluent. Knowledge, know-how and inspiration is shared freely, something which could emerge as an important factor for spreading more sustainable and just ways of organising waste. 	TRC is run for and because of the community and loosens the strict boundaries of private property through promoting giving/donating

Appendix 5: Consent form for interviews

Consent form

For participating in interviews with Sara Skarp, PhD researcher at University of East Anglia

- O I understand that my participation is completely voluntary and that I can withdraw my consent at any time
- O I understand that I can decline to answer any questions without giving a reason
- O I understand that my answers, as an individual, will be anonymous, and my identity will only be known to the research team
- O I understand that my contact details and my answers will be securely stored and will only be used for the stated purposes
- O I understand that I can withdraw or amend my answers until January 30th 2020 by email or phone

Group	name:
-------	-------

Signature of participant:

Name:

Date:

Signature of researcher:

Name:

Date: